Report No. 14747-IND

Indonesia
Impact Evaluation Report
Enhancing the Quality of Life in Urban Indonesia: The Legacy of Kampung Improvement Program

Jakarta Urban Development Project (Loan 1040)
Second Urban Development Project (Loan 1336)
Third Urban Development Project (Loan 1653)
Fourth Urban Development Project (Loan 1972)

June 29, 1995

Operations Evaluation Department

Document of the World Bank

Currency Equivalents

Currency Unit = Rupiah (Rp)
Rp 100 = US$0.45

Abbreviations and Acronyms

ADB	Asian Development Bank
AMDAL	Indonesian Process of Environmental Impact Assessment
APBD/APBN	Provincial Budget
BAPPEDA	Badan Perencana Perkembangun Daerah (provincial planning agency)
BAPPEM KIP	Badan Perencanaan Pembangunan KIP
BAPPENAS	National Development Planning Agency
BKPN	National Housing Policy Board
BOTABEKCI	Cities of BOgor, TAngerang, BEKasi and CIrebon
BTN	Bank Tabungan Negara
BUDP	Bandung Urban Development Project
CBD	Central Business District
CHW	Community Health Workers
DGHS	Directorate General of Human Settlements (Cipta Karya)
DIP	Development Budget Allocation
DKI	Jakarta Metropolitan Government
ERR	Economic Rate of Return
GDP	Gross Domestic Product
GOI	Government of Indonesia
HSL	Housing Sector Loan
IBRD	International Bank for Reconstruction and Development
ID	Institutional Development
IER	Impact Evaluation Report
IET	Impact Evaluation Team
IMF	International Monetary Fund
INPRES	Instruksi Presiden (grant by Presidential Instruction)
ITS	Institute of Technology of Surabaya
IUIDP	Integrated Urban Infrastructure Investment Program
kelurahan	smallest administrative urban area
KIP	Kampung Improvement Program
LP3ES	Lembaga Penelitian, Pendidikan, Pengembangan Ekonomi dan Sosial
lurah	head of kelurahan
M&E	Monitoring and Evaluation
MCK	public washing and toilet facilities
MHA	Ministry of Home Affairs
MHT	Mohd. Husni Thamrin program (KIP)
MIIP	Market Infrastructure Improvement Program
MUDP	Medan Urban Development Project
NGOs	Non-Governmental Organizations
non-KIP kampungs	kampungs that were not included for improvements in the four projects under evaluation
O&M	Operations and Maintenance

OED	Operations Evaluation Department
PCR	Project Completion Report
PDAM	Perusahan Daerah Air Minum (Regional Water Supply Enterprise)
PERUMNAS	National Urban Development Corporation
PKK	Official Women's Organization
PLN	National Electricity Company
POSYANDU	Pos Pelayanan Terpadu (Mother and Child Care Clinics)
PUSKESMAS	neighborhood health centers
Repelita	Recana Pembangunan Lima Tahun (Five Year Development Plans)
RT	Rukun Tetangga (community organization of 50-100 households)
RW	Rukun Warga (neighborhood association made up of several RTs)
SUSENAS	National Social and Economic Survey
UNCHS	United Nations Commission for Human Settlements
UNDP	United Nations Development Program
UNEP	United Nations Environmental Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USL	Urban Sector Loan
YKP	Yayasan Kas Pembangunan (Foundation of Development Finance)

THE WORLD BANK
Washington, D.C. 20433
U.S.A.

Office of Director-General
Operations Evaluation

June 29, 1995

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

SUBJECT: Impact Evaluation Report on Indonesia: Enhancing the Quality of Life in Urban Indonesia: The Legacy of Kampung Improvement Programs. Jakarta Urban Development Project (Loan 1040); Second Urban Development Project (Loan 1336); Third Urban Development Project (Loan 1653) and Fourth Urban Development Project (Loan 1972)

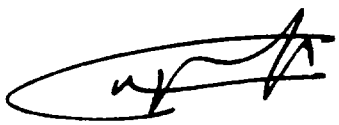
Attached is the Impact Evaluation Report (IER) on the Indonesia Jakarta Urban Development Project (Loan 1040-IND, approved in FY74); the Second Urban Development Project (Loan 1336-IND, approved in FY76); the Third Urban Development Project (Loan 1653-IND, approved in FY78); and the Fourth Urban Development Project (Loan 1972-IND, approved in FY81) prepared by the Operations Evaluation Department (OED). The main objective of the impact evaluation exercise was to understand the medium- to long-term impacts (5 to 10 years after completion) of eighteen years of Bank lending for urban development in Indonesia. The study was launched in Indonesia in September 1993. In preparing the report, OED has concentrated on four main areas of impacts: (i) improvements in the urban environment; (ii) changes in urban land values and markets; (iii) strengthening of institutions; and (iv) scope and durability of impacts. Three components of the four urban projects were evaluated: the Kampung Improvement Program (KIP); the sites and services program; and a city-wide improvement program.

The study has drawn one overriding conclusion: under conditions of rapid economic development, targeted urban-sector improvement programs can have a very positive impact on low-income areas. Those impacts can be achieved at a low cost of investment that reaps high economic rates of return. The study found that the most positive impact of KIP was the upgrade in the quality of life of kampung residents given by improved footpaths, lighting, education and health facilities, living space and reduction of housing density. In addition, the study found that there is much wider access to clean and safe water, private toilets/septic tanks and less frequent flooding outside their homes. More than two thirds of the respondents in project areas attributed the improvements in their kampungs to KIP. The majority of the respondents also suggested that today's overall environmental conditions in their neighborhood is better than before KIP was implemented.

Furthermore, KIP did not encourage an influx of higher-income groups into the kampungs, as had originally been feared. In fact, KIP did not disturb the existing, residential stability of the kampungs. Residents are, however, now better educated and healthier, household size have declined, more residents are employed and have greater income, and women have taken more active role in meeting the economic needs of their families. Improvements in population conditions are not only caused by KIP but also by the opportunities generated by economic growth.

As part of the IER, a three-day workshop for government officials, municipal authorities, beneficiary representatives, international experts, delegates from other international organizations, and Bank staff was held in Surabaya in November 1994. The workshop served as a forum for reviewing preliminary findings, identifying gaps in the information collected, gathering additional information from project participants and reaching consensus on the main findings of the impact evaluation.

Attachment



Contents

This report was prepared by Mrs. Alcira Kreimer (Task Manager) and by Mr. Roy Gilbert, Mr. Claudio Volonte and Mrs. Gillie Brown (consultants).

Preface

This is an Impact Evaluation Report (IER) of four Bank-supported urban development projects in Indonesia: Jakarta Urban Development Project (Ln. 1040); Second Urban Development Project (Ln. 1336); Third Urban Development Project (Ln. 1653), and Fourth Urban Development Project (Ln. 1972)[1]. The main objective of the impact evaluation exercise was to understand the medium and long-term impacts (5 to 10 years after completion) of eighteen years of lending for urban development.

Basic Loan Data (actual)

Loan Number	*Name*	*US$ million*	*Approval*	*Completion*
L1040	Jakarta Urban Development	24.16	9/74	12/80
L1336	Urban Development II	48.85	10/76	6/83
L1653	Urban Development III	51.50	1/79	3/87
L1972	Urban Development IV	42.40	4/81	4/88

The IER was prepared by the Operations Evaluation Department (OED). The study was launched in Indonesia in September 1993. During subsequent missions to the country, the study team organized materials for the evaluation, selected local consultants and visited project cities. In conducting the study, the team specifically focused on the beneficiaries' feedback on the projects. The study discusses briefly the context of urban development in which the four projects were implemented; their physical, environmental and institutional impacts; the influence of the real estate market on project sustainability, and community participation.

Three cities were selected for analysis: Jakarta, Surabaya, and Denpasar. The criteria for selecting the three cities were that they: (i) represent an extensive coverage of the Kampung Improvement Program (KIP), a main component of the four projects; (ii) include sites and services programs; (iii) include city-wide improvement efforts; (iv) represent large and medium urban centers, and (v) in view of limited time and budget, were easy to access to the study team, to facilitate data gathering. Information was collected through questionnaires administered to beneficiaries by local interviewers, beneficiary group interviews, case studies, expert observations, and key informant interviews. Secondary data came from reports and maps provided by national and provincial sources and from Bank files. The kind cooperation and invaluable assistance of local beneficiaries/stakeholders, Government officials, state and municipal enterprises and Bank staff in the East Asia and Pacific Region in the preparation of this report is gratefully acknowledged.

As part of the impact evaluation, a three-day workshop for government officials, municipal authorities, beneficiary representatives, international experts, delegates from other international organizations, and Bank staff (World Bank resident representative in Indonesia, operations division chief and task managers) was held in Surabaya in November 1994 (summary of the discussions are available upon request). The meeting served as a forum for reviewing preliminary findings, identifying gaps in the information collected, gathering additional information from project participants, and reaching consensus about the main findings of the impact evaluation.

[1] Henceforth the four projects will be refered to as Urban I (Loan 1040), Urban II (Loan 1336), Urban III (Loan 1653) and Urban IV (Loan 1972).

Copies of the draft IER were sent to the relevant Government officials and agencies concerned for their review and comments. Comments received from the Borrower have been attached to the report as an Attachement.

Overview
Enhancing the Quality of Life in Urban Indonesia: The Legacy of Kampung Improvement Programs

The Impact Evaluation: Objectives

1. Impact evaluations are an important tool for an institution to learn and make adjustments in its policies and projects and they are a true gauge of project sustainability. Impact evaluations serve several purposes, they: (i) complete the history of projects by writing the "concluding chapter"; (ii) assess the efficacy of the Bank and Borrowers by following investments through to their ultimate goals, and (iii) are a source of lessons needed to improve future development policies and appraisal methods.

2. The main objective of the evaluation study in this report was to understand the medium and long-term impacts (5 to 10 years after completion) of eighteen years of urban lending in Indonesia. The projects included in the study [Urban I (Ln. 1040), Urban II (Ln. 1336), Urban III (Ln. 1653), and Urban IV (Ln. 1972)] were selected from the pool of completed Bank projects which have had sufficient time after the implementation phase, for the outputs, effects and impacts to become evident.

3. This report presents the results of the evaluation of three components of the four urban projects: the Kampung Improvement Program (KIP) component in three major cities (Jakarta, Surabaya, and Denpasar); the sites and services program (Jakarta and Denpasar); and the city-wide improvement program (Denpasar). In order to produce timely study results within a reasonable budget, our research focused upon a few impacts only. We studied four main areas of impacts: (i) improvements in the urban environment, (ii) changes in urban land values and markets, (iii) strengthening of institutions, and (iv) scope and durability of impacts (sustainability).[2]

Background to the Study (Chapter 1)

4. Indonesia has long been a recipient of Bank financing for its urban sector. Along with its growing prosperity, Indonesia's urban areas have also expanded considerably. The process of rapid urbanization started in the 1960s and early 1970s. The urban population increased from 22.6 million in 1970 to 32.8 million in 1980, to 55.4 million in 1990. Today, Indonesia's total population is estimated at 175 million persons, 28 percent of whom live in urban areas. With an annual urban growth rate of 4 percent, the country's urban population will comprise 36 percent of the entire population of the country by the year 2000.

5. Through the past three decades, the Bank has closely monitored this rapid urbanization. The first generation of Bank-financed projects included the four projects analyzed here—Urban I, II, III, and IV (Table 1.1). The four projects were audited by the Operations Evaluations Department (World Bank 1983, 1986a, and 1994e, Box 1.2). The main component of these projects, and the main focus of our evaluation, was the Kampung Improvement Program. Kampungs, low-income dense urban areas, have been the target of several Bank-funded urban

[2] As KIP is an urban infrastructure program that did not deliver completed shelter units, our study does not cover all aspects of housing in Indonesia. Important issues, such housing markets and the roles of the public and private sectors are discussed in OED's recently completed audit of the Indonesia: Housing Sector Loan (Loan 2725), (World Bank, 1995).

development programs (Boxes 1.1). The KIP component as a share of total lending in the four projects studied here ranged from 70 percent in Urban I to 32.8 percent in Urban IV. Other components in the four projects included improvements in solid waste management, drainage, community health services, land registration, and technical assistance and training. The goal of KIP was to alleviate poverty by supporting efforts to improve housing services and basic infrastructure in low-income areas known as kampungs. Although appraised in 1974 and subsequent years, that is, over 20 years ago, Urban I-IV addressed two crucial problems that still affect Indonesia's cities today: inadequate infrastructure coverage and deteriorating environmental conditions.

Low Cost Investment: Housing and Environmental Improvements (Chapter 2)

6. The KIP component of the Urban I-IV projects induced housing and environmental improvements for low-income urban households in Indonesia at a low cost of investment (ranging from US$118 per person in Jakarta to US$23 in smaller cities, 1993 US dollars). The study found that, given the generally favorable macroeconomic environment that prevailed throughout the project implementation period, and the positive demonstration effect of KIP, improvements in non-KIP kampungs have caught up with those in KIP kampungs. There is some evidence that improvements in non-KIP kampungs were completed at a slower pace when compared to the rapid and catalytic effect of KIP on those kampungs where it was implemented.

7. The most positive impact of KIP was the upgrade in the quality of life of kampung residents given by improved footpaths, lighting, education and health facilities, living space and reduction of housing density. In addition, we found that there is much wider access to clean and safe water (although a high number of people still use unsafe well water), private toilets/septic tanks (which were more accepted than the public washing and toilet facilities (MCKs), although not emptied regularly), and less frequent flooding outside their homes. More than two thirds of the respondents in project areas attributed the improvements in their kampung to KIP. The majority of respondents also suggested that today's overall environmental conditions in their neighborhood is better than before KIP was implemented but another third suggested that they were not completed satisfied. Garbage collection (both frequency and quality), for example, was cited as particular problem.

Persisting Environmental Degradation in Urban Areas (Chapter 3)

8. At the citywide level, environmental conditions have deteriorated particularly in areas where rapid population and economic growth has increased the demand for urban infrastructure services. Despite the improvements effected by KIP under Urban I-IV, the environment in major Indonesian cities continues to deteriorate, exacerbated by population growth. The urban environmental challenge in Indonesia today is far greater than it was when Urban I-IV were implemented, and much must still be done to head off the collision course between urban growth and environmental conditions: for example, Denpasar, an area of rapid urban growth, exhibited very bad solid waste management practices among the study areas. In other cases, drainage was not integrated with road upgrading causing flooding problems after roads were raised higher than house floors (Jakarta and Denpasar). In addition, drainage systems were not connected with broader infrastructure causing backlogs at the entrance of the city wide drainage systems, increasing flooding and breeding grounds for disease-carrying insects (Surabaya). At both the kampung and city-wide levels, the projects did not foresee some future environmental problems, such as increased traffic congestion and air pollution. And although the design standards of KIP,

such as the width of footpaths, has helped increase access to fire-fighting units, the use of modern flammable building materials and overcrowding have increased the risk of fire.

KIP Impacts and Rapidly Emerging Real Estate Markets (Chapter 4)

9. Indonesian cities are changing rapidly and some kampungs are potentially valuable urban real estate, depending on their location within cities. The raising demand for prime land is driving kampungs into the modern market. The study attempted to address two project-related questions arising from the rapid transformation of urban areas: (i) are kampung residents benefiting from the investment? and (ii) does the demolition of improved kampungs signal the failure of the Urban I-IV projects? The study's findings were that residents did gain some benefits, but would have enjoyed more if their property rights had been more secure. The study also found that, because such large benefits flowed from KIP, initial project investments could still enjoy economic rates of return of 12 percent, even over a useful life of only five years. Some of the beneficial impacts of the Urban I-IV projects have been swept away by the demolition of improved kampungs to make way for modern urban development in strategic locations in many cities of Indonesia. The rising demand for urban land in a rapidly growing economy such as Indonesia's is likely to make the redevelopment of kampung land into commercial and up-market residential real estate increasingly common.

Community Voice in Structure Development: Urban Stability and Security of Tenure. (Chapter 5)

10. The study's analysis of community participation/consultation in the planning and implementation phases of KIP showed that the involvement of residents varied from one kampung to another. In some kampungs, residents were consulted about the convenience of the location of roads and footpaths, and slightly less about the convenience of the location of water standpipes and sanitary facilities. Consultation in the planning phase of KIP took the form of local meetings in the local officials offices (kelurahan). Similarly, the degree of participation varied. In some kampungs, residents worked through local neighborhood associations to help with simple aspects of KIP implementation, such as the demolition of fences or dwellings. In other kampungs, residents merely observed construction activities.

11. KIP did not encourage an influx of higher-income groups (that is, "gentrification") into the kampungs, as had originally been feared. In fact, KIP did not disturb the existing, residential stability of the kampungs although the social profile of the kampungs has changed under KIP. Residents are better educated and healthier; household sizes have declined; more residents are employed and have greater income; and women have taken a more active role in meeting the economic needs of their families. Improvements in population conditions are not only caused by KIP but also by the opportunities generated by economic growth.

12. Although KIP did not attempt to influence land and housing tenure directly, the expectation was that it would increase ownership; as community security increased, more people would be motivated to clarify and improve the status of the land they occupied. The study found that KIP did in fact increase ownership throughout the improved kampungs or at least greater security of tenure. In addition, the stronger sense of tenure gave residents an incentive to participate actively in the operations and maintenance, O&M, of community facilities, although O&M levels vary from place to place and it is considered one of the weakest points of KIP.

Institutions: What Did They Learn and Remember? (Chapter 6)

13. Despite their focus on physical improvements in the infrastructure and the environment, Urban I-IV did have some landmark impacts on institutional development in the urban sector of Indonesia. For example, new agencies were created by the Government of Indonesia to direct development and investment activities, and the managerial capabilities of existing agencies were strengthened considerably. In particular, the National Urban Development Corporation (PERUMNAS) was established as a new government agency for managing low-cost housing development, and the state savings bank (Bank Tabungan Negara, BTN) was allowed to introduce mortgage lending operations for the first time in Indonesia. And these impacts have been sustained, insofar as the agencies remain important players on the urban stage in Indonesia to this day.

14. Thus, one of the lasting impacts of all four projects was to keep important institutional development issues—notably cost recovery and decentralization—on the urban sector reform agenda. On the issue of cost recovery, government agencies have adhered consistently to the principles of cost recovery embodied in successive urban projects but there are strong underlying reservations about how and when effective cost recovery should be achieved. Despite the recent demonstration of the limits reached by a centralized model in meeting urban sector needs, the government remains the dominant decisionmaker in urban development to this day. Yet difficulties experienced by both the government and the Bank in supervising multi-city projects from Jakarta hastened efforts to devolve project implementation responsibilities to the local level of administration.

15. The study highlighted, however, that the rich learning experience of the urban projects was neither well-documented nor followed progressively throughout the implementation period. Although Monitoring and Evaluation, M&E, was emphasized after the first two projects, there was a failure to implement the agreed M&E component.

Findings and Recommendations (Chapter 7)

16. The main finding of this report is that the Kampung Improvement Program improved the quality of life of Indonesian urban areas at a low cost of investment. The projects had immediate and very positive impacts on the kampungs where the inputs were targeted.

17. Based on both primary and secondary data, the evaluation yielded the following specific findings:

- Improvements in the kampungs prompted residents to invest more in home repairs and in the operations and maintenance of community infrastructure.
- The immediate areas surrounding the KIP kampungs and the site and services program areas benefited from the projects, as the physical and economic impacts of KIP and sites and services programs rippled to those neighboring communities.
- On the other hand, at the citywide level, environmental conditions have deteriorated, particularly in areas where rapid population and economic growth has increased the demand for urban infrastructure services (housing, water and sanitation, footpaths, roads, solid waste disposal, and drainage). Thus, KIP kampungs and site and services program areas and their immediate surroundings are islands of environmental improvements

- Community consultation and participation in the early stages of project preparation and design was important for instilling a sense of project ownership by the community.
- KIP did not encourage urban mobility while creating a greater sense of tenure security towards house ownership. KIP's rapid and extensive coverage may partially account for the low level of household turnover or mobility. City residents, observing that KIP was extended to most of the city, did not feel it necessary to move to take advantage of the program.
- The rising demand for scarce urban land in major Indonesian cities is likely to make the redevelopment of kampung land into commercial and up-market residential real estate increasingly common.
- Despite their focus on physical improvements in the infrastructure, Urban I-IV did have some landmark impacts on institutional development in the urban sector of Indonesia, through the creation of new agencies and the strengthening of existing institutions at the central level.

18. According to the previous findings, the following recommendations and lessons can be proposed:

- *An upgrade program should integrate flood control measures and drainage networks at the citywide scale.* Improved drainage systems helped to reduce flooding. This is a direct positive impact of KIP investments. However, some complaints were voiced about drainage backlogs at the entrance to the main city drain and backups when drains are not cleaned regularly. Improvements in one area should not have a negative impact on residents in neighboring areas.

- *Some aspects of the infrastructure and environmental conditions can be controlled and managed by communities* —for example, dwelling conditions, road and footpath maintenance, solid waste collection from houses, and the upkeep of local drains. Other aspects, such as the illegal dumping of solid waste, the integration of kampung infrastructure with the city-wide infrastructure and the effects of pollution, are beyond the control of the communities and need to be controlled and managed by local governments with assistance by central national authorities.

- *The design of urban projects in Indonesia should include an assessment of the dynamics of the local real estate market.* Growing demand for modern real estate development in Indonesia's cities can thwart low income infrastructure improvements made by projects in prime locations. Redevelopment of many kampungs may come sooner than later, in which case, future projects need to address up-front policy issues of compensation for displaced low income families.

- *Future projects should promote working partnerships with community groups and non-governmental organizations (NGOs) as a way to ensure that they are responsive to O&M requirements in their kampungs.* Consultation and participation of communities and NGOs in the early stages of project preparation and design should be included at the planning stage, since these aspects are important for instilling a sense of project ownership by the community. Although the concept of community consultation and participation is now widely accepted, it still means different things to different people, and many of the local government staff understand the concept but do not understand how it translates into practice. *Therefore, greater understanding and better guidelines for community members, NGOs and project staff should be established.*

- *It is important that the institutional memory and lesson learning capacity developed for urban development projects be maintained so as to provide guidance for future endeavors and to facilitate the sharing of knowledge of these endeavors world-wide.* Important steps must be taken to consolidate institutional memory within both the government and the Bank in future projects. With the support of the Bank, BAPPENAS plans to develop an in-house evaluation capability in all sectors, including impact evaluations. Particularly important is ensuring that baseline data and evaluation systems are in place prior to initiation of any project.

1. Background: The Process of Urban Development in Indonesia

Indonesia has long been a recipient of Bank-financed sectoral lending programs. Along with its growing prosperity, Indonesia's urban areas have also swelled considerably. Today, 28 percent of Indonesia's total population live in urban areas, and this percentage is projected to grow to 35 percent in the next several years. In turn, rapid urbanization has created income disparities between higher-income areas that have been settled more recently and lower-income areas. These income disparities have been exacerbated by disparities in both living and environmental conditions.

These lower-income areas—known as kampungs—have been the target of several Bank-funded urban development programs. The first generation of projects were known as Urban I-IV; their major component was the Kampung Improvement Program (KIP), an initiative to improve the physical environment of the kampungs in such areas as housing, footpaths and roads, sanitation, water supply, drainage, and solid-waste disposal.

Introduction

1.1 Indonesia's rapid urbanization is a phenomenon common to the East Asian region, the most populated area in the world. The urbanization of Indonesia began in the late 1960s and early 1970s. Between 1970 and 1980, the urban population grew from 22.6 million to 32.8 million, a 69 percent increase; by 1990, it had grown by another 59 percent, to 55.4 million persons. Today, 28 percent of Indonesia's total population of 175 million persons live in urban areas. With an annual urban growth rate of 4 percent, the country's urban population will comprise 36 percent of the entire population by the year 2000.

1.2 But along with the continuous growth in the country's urban areas came an increased demand for infrastructural services—housing, water and sanitation, footpaths and roads, and the like. Urban growth also required an urban development policy that could prioritize investment, pricing, and regulatory decisions to govern how services were delivered, and to redress disparities between wealthy immigrants and the largely poor urban population. To formulate its urban development strategy, the government of Indonesia has relied extensively on funding from and the expertise of the World Bank. The effects of the Bank's significant contribution to urban development in Indonesia and the urban development strategy of the Indonesian government are the story of this report.

Objective of the Impact Evaluation

1.3 This impact evaluation analyzes the impacts of four projects in Indonesia: Urban Development I (Ln. 1040), II (Ln. 1336), III (Ln. 1653), and IV (Ln. 1972). The main objective of the impact evaluation is to seek a practical and conceptual basis for understanding the medium and long-term (5 to 10 years after completion) impacts of urban lending in the context of social and economic development. We believe that such an evaluation is of value because it will (a) increase our knowledge about the sustainability of urban development, and (b) establish the conditions under which urban development initiatives meet their goals.

1.4 The projects have had sufficient time after the implementation phase, for the impacts to become evident. The projects illustrate a case in which the Bank has had a continuous trajectory of

financing for urban development. They can be analyzed as a cluster, and are tied to OED audits of the urban sector in Indonesia. The study is the first OED evaluation of impact in the urban sector.

1.5 The impact evaluation of the four urban projects in Indonesia is an attempt not only to complete the history of one of the Bank's most important interventions in the sector, but also to extract the lessons of what has widely come to be regarded today as an example of good practice as far as urban lending is concerned. (*See a brief methodological discussion in Annex A*). The exercise focuses strictly on impact; it looks at results rather than process.

1.6 The main objective of the study was to evaluate the impact of the cluster of urban projects that were implemented over a period of eighteen years. Obviously, such large scale operations can be expected to have numerous and far reaching impacts. The research focused upon a limited number of impacts only. The main five areas in which we concentrate were: (i) beneficiaries (i.e., socio-economic changes); (ii) physical facilities and urban environment (i.e., water supply, sanitation, traffic, etc.); (iii) real estate market and land/house ownership; (iv) strengthening of beneficiary institutions; and (v) sustainability (*see Table 1.1 for a description*).

Organization of This Report

1.7 This report contains seven chapters. The first one discusses the background to the study and the process of urban development in Indonesia. Chapter Two assesses how the KIP component of the urban projects affected housing and environmental conditions in the kampungs over time. Chapter Three explores the current environmental conditions of urban centers where KIP, sites and services, and city-wide improvements were undertaken. It also addresses other environmental problems that have emerged as the urban development agenda policy has been undertaken. Chapter Four analyses the impacts of rapidly emerging real estate markets on kampungs. The following chapter focuses on community participation and consultation in the planning and implementation phases of KIP and discusses variations in the involvement of residents in different kampungs. Chapter Six discusses the impact of the four projects on institutional development in Indonesia's urban sector. Finally, Chapter Seven provides a summary of the main conclusions and recommendations.

The Bank's Lending Program for Indonesia: Urban Projects I, II, III, and IV

1.8 The Bank's lending portfolio for Indonesia has been targeted at helping the government formulate its urban development program and urban policies overall. The urban development program comprised the four Bank-financed projects discussed in the impact evaluation study. Their immediate goal was to support the implementation of the government's policy to provide much-needed housing services and basic infrastructure to the many unserved areas in Indonesian cities. The strategy favored the adoption of cost-effective standards of service provision, to ensure their affordability for low-income groups. Later, the emphasis shifted towards encouraging financial reform and institutional development in the urban sector, items on the policy agenda today (Annex B discusses the primary objectives, components, and implementation results of these and other urban-sector lending activities by the Bank in Indonesia). Bank funds for these urban development projects amounted to US$438.3 million in 1993 dollars; they covered a period from June 1970 (the planning of Urban I) to February 1988 (the completion of Urban IV). According to the completion reports for these four projects, the projects addressed the needs of 4.3 million people and 11,331 hectares in 11 cities *(Map 1.1)*. Each successive project was targeted at different cities, and comprised six broad components: Kampung Improvement Programs (KIP), solid-waste

management, drainage improvement, community health services, land registration, and technical assistance and training for implementing the projects *(Table 1.2)*.

Table 1.1: Description of Impact Evaluation Focal Areas

Focal Area	*Issues Covered*
Beneficiaries	Changes (if any) in the socio-economic conditions of the beneficiaries that can be related to the four urban projects.
Physical facilities and urban environment	Typically, physical facilities improved in urban projects are roads, solid waste collection, water and waste water, drainage and sewage.
Real estate market and land/houses ownership	Impacts on the potential land use changes as well as changes in land/houses tenure
Strengthened of beneficiary institutions	The projects created new institutions or provided technical assistance to existing ones. We explore if and how the projects have changed the way these institutions conduct business as a result of the projects.
Sustainability	To complete the history of the projects, two underlying issues will be evaluated: the scope and longevity of the projects. What is the expected life of the different kinds of investments made? In other words, how long should the benefits be expected to last?

1.9 Two additional components of the projects also included in this study are the sites and services program (Jakarta and Denpasar) and the citywide improvement component in Denpasar. The sites and services program was designed to provide the rapidly expanding urbanized areas of Jakarta and Denpasar with urban infrastructure. The program consisted of the provision of subdivided lots (varying in size from 80 to 200 m^2), with a minimum-standard core shelter (measuring 20 m^2) and consisting of a compacted lime and earthen floor, stanchions supporting a clay-tile roof, bamboo matting walls, and a sanitary core with one septic tank. The Denpasar citywide improvement concentrated mainly on two services: solid waste and water supply.

1.10 As KIP is an urban infrastructure program that did not deliver completed shelter units, the present study findings do not cover all aspects of housing in Indonesia. Important issues, such housing market and the roles of the public and private sectors are discussed in OED's recently completed audit of the Indonesia: Housing Sector Loan (Loan 2725), (World Bank, 1995)

What are Kampungs and Kampung Improvement Programs?

1.11 Kampungs are densely populated, primarily low-income neighborhoods (see Box 1.1). In essence, urbanization has taken place around them. They are located in strategic parts of the city, in the midst of more affluent and expensive neighborhoods, along government centers, and near shopping areas. In many cases, they are pockets within a larger neighborhood that provides services. Before KIP were introduced, most kampungs lacked basic urban infrastructure and services.

1.12 Kampung Improvement Programs have been the primary components of the four urban projects. They emphasize providing basic "minimum" service standards for maximizing coverage to even the poorest neighborhood. KIP have included various components throughout the years, but they have evolved into a standardized package of eight improvement activities: (1) upgrading and improving vehicular roads, with associated drains; (2) upgrading and paving footpaths; (3) rehabilitating and creating kampung-wide drainage; (4) providing garbage bins and collection vehicles; (5) providing safe drinking water through public taps; (6) constructing public washing and toilet facilities (MCK) for clusters of kampungs; (7) constructing neighborhood health clinics (PUSKESMAS); and (8) constructing primary school buildings. The first KIP was initialized in

Table 1.2: The Four Urban Development Projects

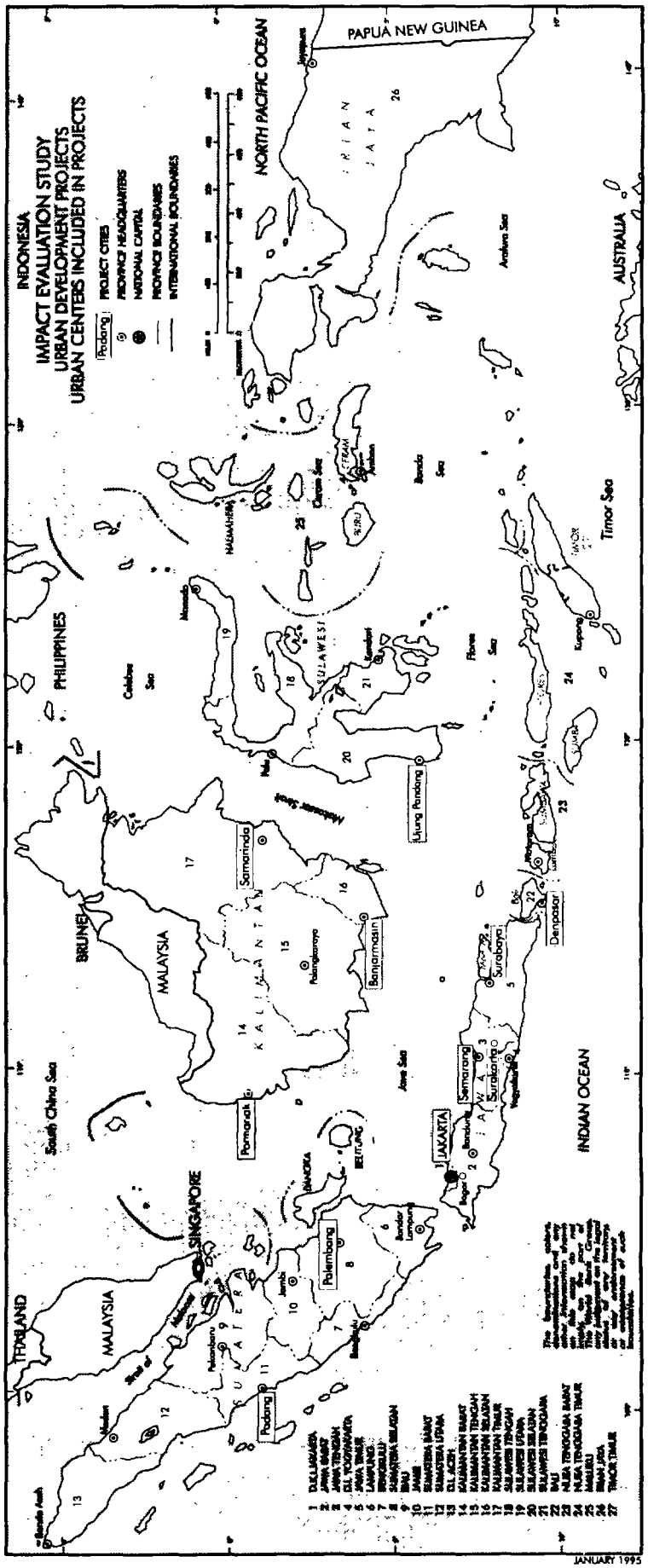
Project Name *Loan No.* *Cost* *IBRD loan* *Urban centers*	*Goals/Objectives*	*Components*
Urban I (1974): L1040 US$51.0 million US$25.0 million Jakarta	To establish a national urban development program that would raise the living conditions of the urban poor by improving their access to better physical infrastructure and housing.	KIP*: physical infrastructure improvements to 1,980 ha. of kampungs, benefiting 890,000 low-income residents; (ii) sites and services program* 130 ha. of new urban land with urban services, subdivided into about 7,930 residential lots for sale primarily to low-income families; and (iii) technical assistance aid for the National Urban Development Corporation (PERUMNAS) for management assistance, project execution, and preparation.
Urban II (1976): L1336 US$104.8 million US$52.5 million Jakarta and Surabaya	To initiate the KIP for improving the living conditions of the urban poor outside Jakarta (Surabaya).	KIP-Jakarta*: physical infrastructure improvements to 3,000 ha. of kampungs, benefiting 1.2 million low-income residents; (ii) Supratman Program-Surabaya*: physical improvements selected by kampung residents, who contribute 50% of cost, 375 ha. of kampung improvements, and (iii) technical assistance to Cipta Karya for project preparation and execution; GOI property tax improvement program, and feasibility studies for urban projects.
Urban III (1978): L1653 US$96 million US$54 million Jakarta, Semarang, Surabaya, Surakarta and Ujung Pandang.	To expand the existing KIP in Jakarta and Surabaya and to extend it to four other secondary cities and to broaden the KIP, including investments for improving general public health (e.g., solid-waste management).	KIP*: physical improvements to 750 ha., benefiting 210,000 people in Jakarta and 4 secondary cities; (ii) solid-waste management in Jakarta and Surabaya; (iii) drainage improvement, (iv) small business development; (v) land registration assistance, and (vi) technical assistance in project planning, design, implementation, monitoring, and evaluation; and solid-waste management
Urban IV (1981): L1972 US$85.93 million US$43 million Banjamarsin, Denpasar, Padang, Palenbang, Pontianak and Samarinda	To implement a nationwide KIP; a sites and services program; and a strategy for strengthening the management capabilities of the Bank Tabungan Negara (BTN) and the National Urban Development Corporation (PERUMNAS)	KIP* physical improvements to 1,900 ha., benefiting 500,000 people; (ii) sites and services*: land acquisition and construction of infrastructure and housing facilities, (iii) Denpasar city-wide improvements*, (iv) urban mapping program for about 100 large and medium-size cities, (v) studies and technical assistance (planning and implementation of KIP, improvement of municipal tax collection; training; and the development of PERUMNAS and Bank Tabungan Negara (BTN) functioning and capabilities)

*Components included in this study.

1969 by the government of Indonesia and the city of Jakarta under the first Five-Year Development Plan. The first development plan, known as *Repelita I*, was financed by the government to upgrade the infrastructure and services of urban neighborhoods (See Box 1.2) The KIP component as a share of total lending in the four projects studied here has fallen successively—from 70 percent in Urban I to only 32.8 percent in Urban IV. But the Bank has continued its lending activities for Indonesian's urban-sector development in several other projects since Urban I, as described in Annex B.

The Macroeconomy During Project Implementation

1.13 Widespread attention has recently been drawn to the East Asian economic miracle. However, rapid economic growth is not a new phenomenon in Indonesia. In fact, KIP efforts to redress living standards in kampungs did not take place in an economic vacuum. Favorable macroeconomic conditions accompanied the implementation of the four urban projects, as GDP rose and inflation



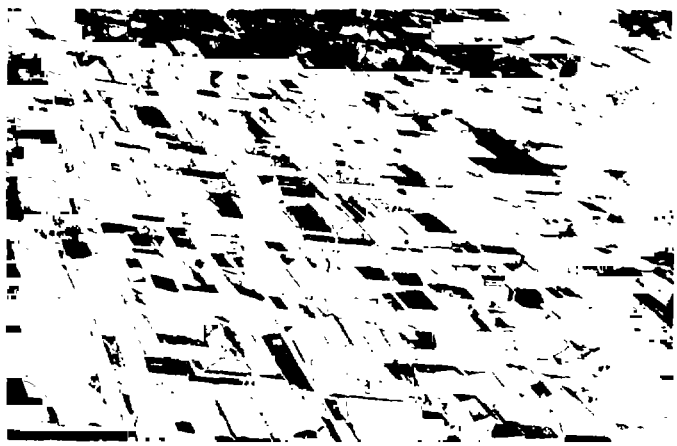
Map 1.1: Location of urban centers included in the four urban projects under evaluation

fell throughout the period (table 1.2). Rising world prices for Indonesian crude oil boosted confidence in the country's development, attracting external aid to finance large government investment programs in the infrastructure.

1.14 Indonesia's economic growth is still strong: GDP per capita stands at more than twice the level of the 1970s, and inflation is sill far below it historically highest level. The country is more prosperous today than it was when Urban I–IV were implemented. Poverty has declined remarkably, affecting only 15 percent of the total population, compared with more than 50 percent in the 1970s.

1.15 Indonesia's economic transformation has been particularly dynamic since the 1970s, when Urban I–IV projects were prepared and appraised. Oil revenue was largely responsible for propelling economic growth. In fact, growth was so strong that the Bank considered the government to be the only player in Indonesia's development during the Urban I–IV period. Development specialists in the 1970s did not identify a major role for the private sector in Indonesia's economic development program.

1.16 But as international oil prices began to fall after 1988, the structure of Indonesia's macro-economy underwent change, affecting the nature of project financing. Public-sector capital investment projects, such as those in infrastructure, had to be rephased in the face of budget constraints. Public sector investment, which had been equivalent to 12 percent of GDP during the 1970s, fell to only 9 percent of GDP. At the same time, interest rates moved closer to their market levels, expanding Indonesia's financial markets and making them more attractive.



Aerial view of a kampung in Surabaya.

Vehicle road improved by KIP in a Surabaya kampung, featuring a covered drainage system.

1.17 These previous and current macroeconomic conditions have important consequences for our study. First, any positive impacts of the KIP must be judged against the favorable economic climate in which they were implemented. On the one hand, positive impacts may have been in part a function of a sound macroeconomy. On the other, a sound macroeconomy may have led to improvements in kampungs that were not part of the KIP effort, thus narrowing any impact differentials between the two. Second, current macroeconomic trends are spurring private-sector involvement in Indonesia's urban development, thus affecting how externally and publicly funded projects such as KIP can be pursued in the future.

Box 1.1: Kampungs: Classified by Location and Type of Development

By Location

- *Open kampungs*: have direct access to principal streets
- *Semi-open kampungs*: in commercial areas, but "closed" (surrounded) by public buildings
- *Closed kampungs*: in inner-city areas, but away from main streets
- *Fringe kampungs*: in the periphery of built-up areas; usually with high population growth
- *"Rural" kampungs*: still within the administrative boundaries of cities, but with a strong rural atmosphere; easy access to urban facilities

By *Type of Development*

- *Traditional kampung*: mostly old and built by the earliest inhabitants of a city
- *Built by city government during colonial period*: in strategic locations to provide cheap labor to wealthy areas
- *Regularized*: originally squatters on public land, primarily before the enactment of the basic agrarian law (land law no. 5/1060) and later "formalized" through the KIP
- *Reclaimed and regularized*: very similar to the previous one, but on reclaimed land, primarily coastal areas, cemeteries, or marshlands.
- *Marginal kampungs*: do not conform to land-use plans, and cannot be regularized due to problems of land rights and/or marginal land, along main storm drains or railroad tracks

Kampung Improvement Programs

The Kampung Improvement Program (KIP) was first introduced during the colonial government, when members of the opposition in the Dutch Parliament demanded more "humane" conditions for local populations living in urban areas in the colonies. The establishment of municipal governments early in the century brought about a renewed interest in the topic of kampung improvement. The first period of KIP extended from the 1920s to the beginning of World War II. Surabaya and Semarang started with the improvement of some kampungs in 1924, an effort initiated by the municipal government.

In the late 1960s, lacking resources for a comprehensive Kampung improvement program, Surabaya was able to offer only limited assistance (concrete slabs and gutters to improve pedestrian ways and local drainage). Kampung inhabitants had to apply for in-kind assistance and take responsibility for installing the improvements. This was the beginning of a participatory KIP, known as W.R. Supratmant KIP. The KIP in Jakarta was supported by Urban Development Project I. Funding was extended to Surabaya in Urban II and to other cities in Urban III and IV.

Later Bank-financed projects no longer required communities to raise matching funds, and Bank loans and contributions from the central government and the Jakarta metropolitan government (DKI) were used to fund all project components. While DKI continued to manage the projects, the Directorate General of Human Settlements (Cipta Karya) of the Ministry of Public Works became responsible for providing technical assistance and monitoring project implementation. While construction standards remained low to ensure the widest possible geographical coverage, the program developed into a standardized package of 8 components (listed in the text).

Table 1.2: Indonesia: Evolving macroeconomic indicators

Reference year	*GDP per capita (Rp 000s in 1992 prices)*	*Annual GDP growth (%)*	*Annual inflation (%)*	*Crude oil price index (1975 = Rp100)*	*Exchange rate (Rp = US$1.00)*
1973					
(appraisal of	493	11.3	30.9	32	415
Urban I)	+ve	+ve	+ve	+ve	constant
1976					
(appraisal of	555	6.9	19.8	102	415
Urban II)	+ve	+ve	constant	+ve	constant
1978					
(appraisal of	616	8.1	1.8	107	625
Urban III)	+ve	+ve	+ve	constant	-ve
1980					
(appraisal of	680	9.6	18.5	242	627
Urban IV)	+ve	+ve	-ve	+ve	constant
1992					
	1,343	6.3	7.5	154	2,062
	+ve	-ve	-ve	-ve	-ve

Note: *+ve/constant/-ve* indicates the change in the value of the indicator from the previous year.
Source: IMF International Finance Statistics.

Did the Urban Projects Achieve Their Physical Targets?

1.18 The four projects were subjected to audits by the Operations Evaluating Department. The OED findings indicated that the projects were successful (Box 1.2). In fact, the successive implementation of the projects reflected the incremental improvements that were made to well-tried solutions that were part of Urban I.

1.19 But the success of the projects somewhat buries the extensiveness of the problems facing kampungs at the outset. Although infrastructural and environmental improvements were made, each successive project continued to confront major physical impediments in the urban sector (as indicated by the World Bank appraisal reports). The perpetuation of these problems to this day is also an important topic of discussion in this paper.

Policies and Initiatives That Had an Impact on the Projects

1.20 Current urban development in Indonesia has been the culmination of a long series of demographic, budgetary, and policy circumstances. Annex C describes the Bank's urban strategy as agreed during discussions with the GOI. This section discusses still other factors that had an impact on the results of the study—in particular, initiatives and policies beyond the domain of the urban projects discussed in the report. They include family planning, health care and poverty reduction efforts, industrial and urban growth, and culture and tradition.

1.21 The emphasis placed on reducing population growth rate since the early 1970s has had highly successful and well-published results. It is clear that the 1980–1990 growth rate in Indonesia has fallen from its 1970–80 level. It is also apparent that population growth in each of the areas studied has declined. The National Family Planning Coordinating Board has played an important role in reducing population growth since its establishment in 1970.

Box 1.3 Findings from the OED audits: the success of the incremental approach to urban development

The OED audits of Urban I, II, II, and IV (World Bank 1983, 1986a, and 1994e) found that the projects surpassed their infrastructural objectives, and that these physical aspects of urban development were more successful than those reflected by the policy changes introduced in the portfolio later on (Urban Sector Loan, Loan 2816). The advantage of the "physical approach" in Urban I, II, III and IV was that both the Bank and the government knew how to go about doing the job. When replicated in successive operations, the approach had important benefits.

The audit for Urban I found that the implementation of the KIP component conformed to planning expectations, and that one of the most important results of the project was the creation of PERUMNAS—the National Urban Development Corporation. But the more innovative components at the time—such as the establishment of sites and services and the introduction of mortgage financing—were subject to delays. OED's audit of Urban II found that the project successfully continued the already substantial Jakarta KIP and extended it to Surabaya, the second largest city in Indonesia. But the audit expressed concern about the absence of a specific cost-recovery mechanism or measures to increase local revenues to ensure that KIP could continue to be financed. Their absence raised doubts about the sustainability of the component.

The audit of Urban III and IV found that the incremental urban development strategy of successive projects had a positive impact. The positive impact of KIP investments on the urban poor was multiplied as coverage expanded to other project cities. The early projects reflected environmental concerns implicitly by including infrastructure improvements in water, sanitation, and sewerage. Yet, although KIP was an "environmentally friendly" investment, it did not guarantee overall improvement in the urban environment.

1.22 Important developments in health care, poverty reduction, and education have also emerged in the past 10 to 15 years. Among the more important primary health care improvements has been the introduction of Mother and Child Health Clinics, POSYANDU. The clinics are run jointly by the community health centers and the official family welfare organization (PKK). The clinics are run at the neighborhood level and operate about once or twice monthly. Among other activities, the clinics monitor the growth of children younger than age 5, identifying those whose growth rate is below the "red line" and administering supplementary feeding: examine and advise pregnant women; provide mothers with guidance in family health and nutrition; and operate a vaccination program. The development of the POSYANDU signaled a major switch in emphasis from curative to preventive medicine in the early to mid 1980s.

1.23 Since the 1970s, income per capita has increased by 4.5 percent annually. The estimated 60 percent of the population (about 70 million people) who lived in absolute poverty in the 1970s has declined to about 27 million people, or 15 percent of the population. Infant mortality has fallen from 225,000 live births in the early 1960s to an estimated 60,000 live births in 1992. Figures for primary school and secondary school enrollment and for adult illiteracy show equally dramatic improvements, and life expectancy at birth has increased from 41 to 61, a 50 percent increase.

1.24 Culture and tradition also affect the impacts of the projects. Indonesia has a diversity of cultures, each with their own traditions, attitudes, and customs. Two of the cities in this study,

Jakarta and Surabaya, are located in Java, and the third, Denpasar, is located in Bali. Undoubtedly, some of the differences between the Javanese cities and Denpasar (such as house sizes) can be attributed more to culture than to infrastructural improvements. For example, the Javanese, particularly in East Java, are renown for their community spirit, and mutual cooperation (*gotong royong*) is strong; in Bali, the women are known for working in such jobs as laboring and street cleaning, which women in Java do not do. There is little quantitative evidence for these cultural differences, but they are noted in the text where applicable.

2. Low Cost Investment: Housing and Environmental Improvements

The KIP component of the Urban I-IV projects induced housing and environmental improvements for low-income urban households in Indonesia at a low cost of investment (ranging from US$118 per person in Jakarta to US$23 in smaller cities, 1993 US dollars). The study found that, given the generally favorable macroeconomic environment that prevailed throughout the project implementation period, and the positive demonstration effect of KIP, improvements in non-KIP kampungs have caught up with those in KIP kampungs. There is some evidence that improvements in non-KIP kampungs were completed at a slower pace when compared to the rapid and catalytic effect of KIP on those kampungs where it was implemented.

The most positive impact of KIP was the upgrade in the quality of life of kampung residents given by improved footpaths, lighting, and education and health facilities, living space and reduction in housing density. In addition, we found that there is much wider access to clean and safe water (although a high number of people still use unsafe well water), private toilets/septic tanks (which were more accepted than the public washing and toilet facilities, MCKs, although not emptied regularly) and less frequent flooding outside their homes. More than two thirds of the respondents in project areas attributed the improvements in their kampung to KIP. The majority of respondents also suggested that today's overall environmental conditions in their neighborhood is better than before KIP was implemented but another third suggested that they were not completed satisfied. Garbage collection (both frequency and quality), for example, was cited as particular problem.

Background to Analysis

2.1 This chapter assesses how the KIP component of the urban projects affected housing and environmental conditions in the kampungs over time. The impacts of KIP are measured as the differential rate of housing and environmental improvements in KIP kampungs and non-KIP kampungs

2.2 Information for assessing the impacts of KIP comes from a variety of sources (*see methodology in Annex A*): (1) survey of residents in seven kampungs in Jakarta, Surabaya, Denpasar, and two sites and services areas in Jakarta and Denpasar; (2) group interviews with different sectors of the population; (3) key informant interviews (e.g., national and local authorities); (4) workshop in Surabaya; and (5) expert observations in the field. Point-in-time comparisons are based on the results of other surveys that were fielded in the various kampungs throughout the project implementation period.

2.3 Assessing the impacts of KIP is complicated by three factors-the prevailing macroeconomic conditions during the project implementation period, the nature of the projects themselves, or the "demonstration environment," and the complexity of the urban context. The generally favorable economic conditions in Indonesia may have spurred improvements in KIP and non-KIP kampungs, dampening the effect of the KIP projects themselves. It was also noted in interviews with community groups and local and national authorities that KIP had "slipover" effects on non-KIP kampungs, also narrowing impact differentials between the two. As a consequence, one of the desirable features of KIP was that it served as a model for non-KIP programs elsewhere in urban areas, broadening infrastructure coverage to other urban areas, and

heightening confidence in the private sector overall, creating greater incentives for investment in urban areas throughout Indonesia.

Cost of Investments

2.4 The KIP component of the four urban projects under study had a low cost of investment, varying from US$118 per person in Jakarta to US$23 in smaller cities (1993 US dollars). There is a clear direct relationship between investments per capita and per hectare and the population and area improved.

2.5 When all cities are compared, a direct relationship exists between costs and number of persons and hectares. That is, with increasing project beneficiaries or area, the project cost increases. Table 2.1 presents the costs per person and per hectare of improved kampung by project and by city in 1993 dollars (constant dollars). On average, about US$100 were invested per person, although investments declined from US$118 in Urban I to US$82 in Urban IV over a 14-year period. Similarly, the average cost per hectare fell from a maximum of US$50,280 in Urban I to US$20,782 in Urban IV. These reductions can be attributed to experiential effects and the successively smaller size of the cities in which KIP were implemented.

Table 2.1: Total number of beneficiaries of KIP and hectares improved: cost of KIP per person and hectare *(1993 U.S. dollars)*

	Cost (US$ 1993 millions)	*Area (hectare)*	*Number of People*	*Cost/person (US$)*	*Cost/hectare (US$)*	*Years of Implementation*
Urban I						1974-80
Jakarta	105	2,080	890,000	118	50,289	
Urban II						1976-83
Jakarta	166	3,435	1,400,000	118	48,243	
Surabaya	15.4	441	236,000	65	34,872	
Project total	181.4	3,876	1,636,000	111	46,800	
Urban III						1979-87
Jakarta	69.2	1,410	504,092	137	49,110	
Semarang	8.48	417	196,658	43	20,331	
Surabaya	18.5	908	344,300	54	20,421	
Surakarta	3.76	210	51,200	73	17,914	
Ujung Pandang	11.0	460	171,000	64	23,902	
Project total	110.94	3,405	1,267,250	88	32,581	
Urban IV						1981-88
Banjarmasin	6.59	270	86,000	31	9,819	
Denpasar	2.38	430	36,000	23	3,506	
Padang	7.78	310	47,000	99	21,742	
Palembang	10.8	320	157,000	59	24,227	
Pontianak	8 11	430	88,000	63	13,078	
Samarinda	5.28	210	85,000	28	54,170	
Project total	40.94	1,970	499,000	82	20,782	
Total all projects	438.3	11,331	4,292,250	102	38,681	1974-88
Sites and services						
Jakarta	41.3					1974-80
Denpasar	10.58	45.51			232,476	1981-88

Source: SARs and PCRs of four projects.

Housing Improvements

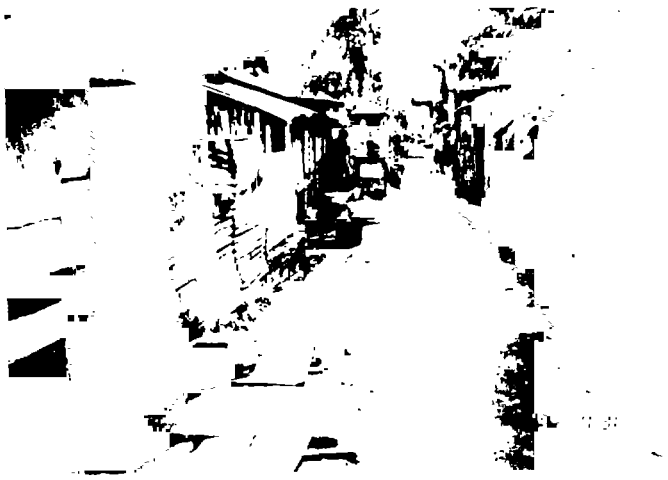
2.6 Housing improvements are measured along three dimensions: the quality of wall, flooring, and roofing materials used in the houses; dimensions of living space, as measured by a number of

housing indicators and the type of improvements made by residents in the past four years and those planned for the future.

Quality of Materials Used in Housing

2.7 "Permanent" materials are used widely in both KIP and non-KIP kampungs. In addition, the quality of the materials used in housing in both KIP and non-KIP kampungs has improved over time to the point where housing in both kampungs is of similar quality. The survey conducted as part of the impact evaluation included three degrees of quality of materials used in housing construction. High quality, permanent materials, are defined as brick/cement or brick walls, tile/terrazzo floors, and tile or asbestos roofs. Medium-quality, semi-permanent materials, are cement/wood walls, cement floors, and zinc roofs. Low quality, temporary materials, are bamboo/wood walls, earthen floors, and wood roofs.

The roof of a "high quality" house in a Surabaya kampung is being improved



"Low quality" housing in a Denpasar kampung

2.8 The overwhelming majority of respondents in Jakarta, Surabaya, and Denpasar have brick/cement walls, tile/terrazzo and cement floors, and tile and zinc roofs (Table 2.2). Overall, houses in KIP and non-KIP kampungs in these cities are constructed with similar materials. But the types of flooring materials used in houses in the KIP and non-KIP kampungs in Jakarta show a difference. More houses in KIP kampungs use tile/terrazzo, which is a higher-quality material than the type of flooring material used in mostly non-KIP houses–cement. An analysis of these three components of housing quality revealed that the differences lay not between KIP and non-KIP kampungs in the cities, but between the KIP kampungs of the different cities, which may be due to differences in culture.

2.9 A more revealing analysis of housing-quality differences between KIP and non-KIP kampungs is shown by point-in-time comparisons of wall and flooring material in Jakarta (Figure 2.1). We compared the results of the survey in Jakarta with the results of two previous surveys, one conducted in 1976 and another

one in 1981 (Taylor, 1983). (Unfortunately, comparable information was not available for Surabaya and Denpasar, nor was information available on roofing materials.)

Table 2.2: Housing materials used in different dwellings (percentage of respondents)

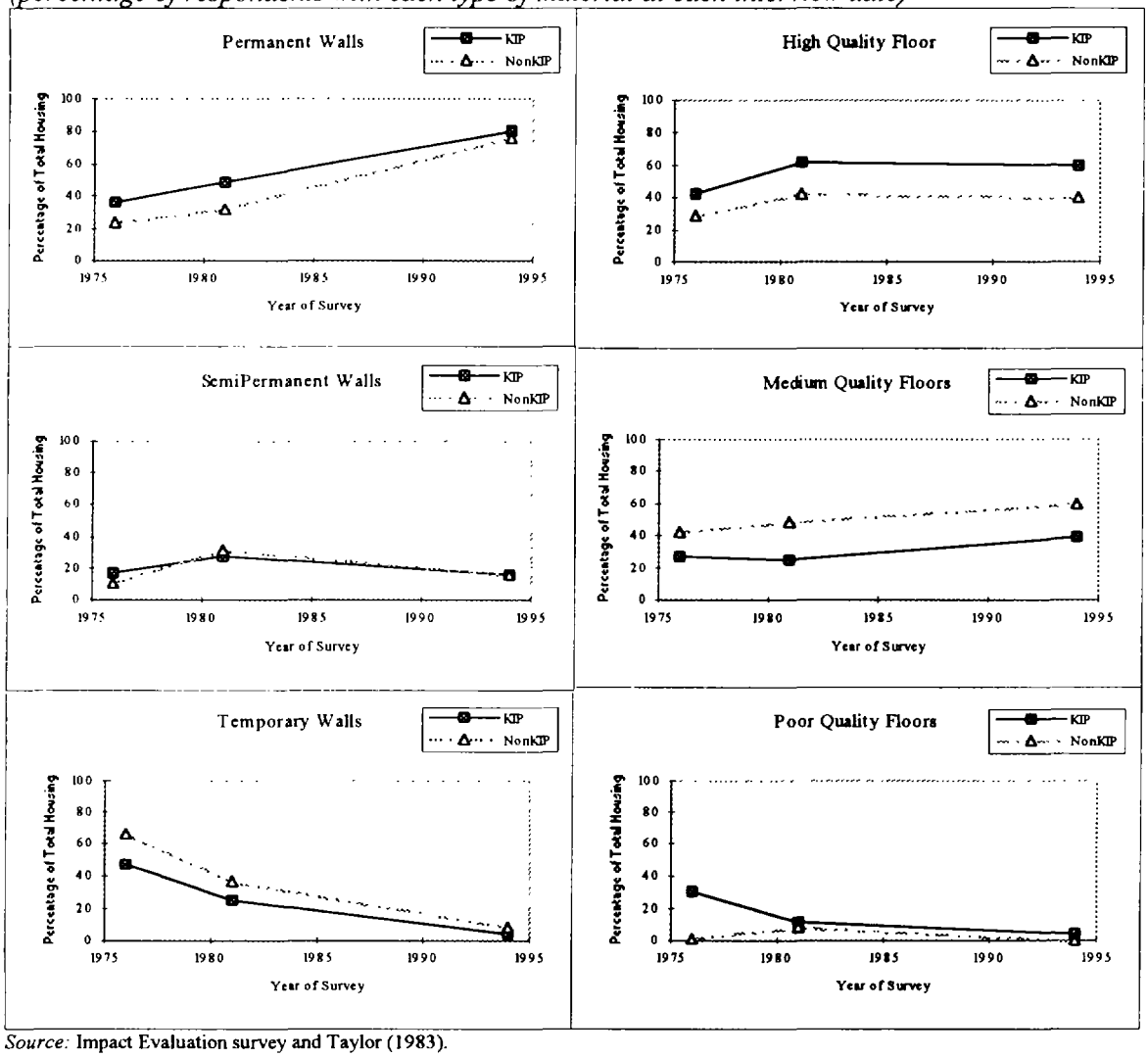
Site	*No. of Respondents*	*Type and Quality of Material*			
		High Quality	*Medium Quality*	*Low Quality*	
Walls		Cement/Brick	Cement/Wood	Wood/Bamboo	
Jakarta KIP	50	80	16	4	
Jakarta non-KIP	25	76	16	8	
Surabaya KIP	50	88	2	10	
Surabaya non-KIP	25	92	4	4	
Denpasar KIP	25	96	4	0	
Flooring		Tile terrazzo	Cement	Earth	Other
Jakarta KIP	50	58	38	4	0
Jakarta non-KIP	25	40	60	0	0
Surabaya KIP	50	46	40	0	14
Surabaya non-KIP	25	60	16	0	24
Denpasar KIP	25	72	24	4	0
Roofing		Tile	Zinc	Wood	Other[a]
Jakarta KIP	50	78	18	0	4
Jakarta non-KIP	25	72	12	0	16
Surabaya KIP	50	92	6	0	2
Surabaya non-KIP	25	100	0	0	0
Denpasar KIP	25	88	4	0	8

Note: (a) The other category means asbestos roofing

2.10 The quality and conditions of wall materials have improved in both KIP and non-KIP kampungs in Jakarta. More houses have permanent walls than either semi-permanent or temporary walls. Overall, improvements in wall materials in KIP kampungs accelerated more rapidly between 1976 and 1981, right after the project investments, than between 1981 and 1994, and the quality of walls in KIP and non-KIP kampungs is equal today, 10 years after project completion. In addition to a sound macroeconomy and the pervasive effect of the KIP on non-KIP kampungs, this phenomenon could also be explained by the fact that wall improvements are usually less expensive and make the structure more permanent; thus, more people would be able to afford and prefer them.

2.11 Conclusions about improvements in flooring material cannot be drawn as easily. KIP kampungs started with higher-quality floors than did non-KIP kampungs and today, the difference has narrowed down. Improvement in floors was faster in KIP-kampungs during project investments. By 1981, more than 50 percent of respondents in KIP-kampungs had better quality floors than those in non-KIP kampungs (about 40 percent). Although many more houses in KIP kampungs had earthen floors and thus low-quality floors in 1976 than did non-KIP kampungs, today our survey reported almost none. Reduction in the frequency of flooding in Jakarta due to KIP-related components could be the primary determinant for improvements in floor quality: less flooding gives kampung residents an incentive to improve the quality of their flooring.

Figure 2.1: Comparison of the Quality of Wall and Flooring Materials in Jakarta
(percentage of respondents with each type of material at each interview date)



Source: Impact Evaluation survey and Taylor (1983).

2.12 The survey in the sites and services areas showed a dramatic increase in the quality of housing. According to the appraisal reports, Urban I and IV provided core housing that consisted of compacted lime and earthen floors, clay-tile roofs, and bamboo matting walls (World Bank 1974a, 1981). During the first two years of occupancy or while residents were paying the downpayment, residents in the sites and services areas were not allowed to make home improvements. But all respondents indicated that they had upgraded the walls of their houses to cement and/or brick and their floors to tile or cement since then.

Dimensions of Living Space and Kampung Density

2.13 A series of housing indicators were compiled to analyze and compare the present housing conditions in KIP and non-KIP kampungs in Jakarta and Surabaya. Table 2.3 presents average values per site for a selective number of housing indicators. There is an apparent pattern that emerges from these figures, KIP kampungs: (1) present larger lots (*lot size*); (2) are less densely

built (*houses per hectare* and *building coefficient* (percentage of lot covered by a structure); and (3) are less densely populated (*number of persons living in each dwelling* and *space per person* (m^2) than in non-KIP kampungs for each city. The number of rooms occupied was the only indicator that did not show a clear difference between KIP and non-KIP in Surabaya. This is not always a significant indicator because we observed that some people were sub-dividing rooms into smaller ones without increasing the actual dwelling dimensions. It can be concluded that KIP has improved the living space and reduced housing density in kampungs where it was implemented.

Table 2.3: Indicators of dimensions of living space and kampung density.
(All figures shown are averages by type of site).

Site	*Lot size (m^2)*	*Houses/ha.*	*Building Coefficient (%)*	*Number of persons living in dwelling*	*m^2 per person*	*Number of rooms occupied*
Jakarta						
KIP	140	73	80	6.6	21	7.6
non-KIP	57	176	93	7.6	7.5	5.7
Surabaya						
KIP	120	84	80	5.8	21	7.5
non-KIP	90	111	86	6.4	14	7.7

Physical Improvement in the Past Four Years and for the Future

2.14 An earlier evaluation in Jakarta by Taylor (1983) found that investments in KIP kampungs were significantly greater, and that houses in KIP kampungs were in better condition than those in non-KIP kampungs. This survey was completed right after Urban I and II were completed (early 1980s). Differences in home improvement expenditures between KIP and non-KIP kampungs in the 1983 study were statistically significant. For all households, the average difference in investment between the two groups was about US $220. When Taylor examined only homeowners, he found that the difference was greater–about US$300 (US$550 in KIP kampungs, compared with US$247 in non-KIP kampungs). Our study found that this difference no longer exists in Jakarta and Surabaya. Thus, it is likely that greater investments in kampung housing occurred at the outset, and that over a period of time, the focus of investments shifted to investments in routine maintenance and repairs.

2.15 Residents in Jakarta, Surabaya, and Denpasar were asked whether they had made any house repairs in the past four years and whether they were planning to make any in the near future. The majority of residents in both KIP and non-KIP kampungs in Surabaya and Denpasar (approximately 70 percent) did make repairs in the past four years. Conversely, only 40 to 45 percent of respondents in Jakarta did so. Furthermore, more than 75 percent of respondents in Jakarta and Surabaya are not planning any repairs in the near future. Only about two-thirds of the respondents in Denpasar are planning future repairs.

2.16 The pattern of actual and planned improvements may be a function of when the respective urban projects were implemented. The fewer actual and planned improvements in Jakarta may be due to the fact that it was the initial target city of Urban I, implemented much more than four years ago. Surabaya was targeted under Urban II, but received the bulk of its investment activity as part of Urban III, just slightly more than the "four years ago" category in the survey. Denpasar, part of

Urban IV, received its KIP investment more recently. Thus, the bulk of both actual and planned physical improvements in Jakarta may have been played out long ago under the KIP investment; in Surabaya, physical improvements may have reached their peak, and thus little more is planned. In Denpasar, both actual and planned improvements may now be peaking under the KIP investment.

2.17 It seems apparent that housing improvements, mainly walls and flooring, dimensions in living space and timing of housing improvements are related to the timing of KIP investments. The KIP kampungs received an influx of beneficiary funds for improvements right after KIP investments. This was evident in Jakarta, where most people had already made the major housing improvements at the time of the study and are not planning any more investment, while in Denpasar, improvements are still going on. Wall, and to a lesser extent, floor improvements, had a jump in their quality after KIP investments compared to the non-KIP kampungs. The more spacious living areas in KIP kampungs also confirmed the better living conditions existent in KIP kampungs. Therefore, KIP kampungs reached a better living quality faster than non-KIP kampungs. The duration of the KIP effect is not clear, but in Denpasar, it seems that, today after six years of project completion, housing improvements and repairs are still going on. This could be a topic for further investigation.

Improvements in Environmental Conditions: Neighborhood Facilities Assessed by Residents and Interviewers

Overview of Assessments

2.18 Residents of kampungs in Jakarta, Surabaya, and Denpasar were asked to assess the conditions of the following neighborhood facilities: nearest motor road and footpath, water facilities, drainage, garbage collection, sanitation, lighting, and education and health facilities. They were also asked to rate the overall environmental conditions of their kampungs. The majority of resident respondents perceived that their neighborhood facilities had either improved or had not deteriorated. But although 66 and 76 percent of the respondents suggested that overall conditions had improved, more than a third of the respondents who indicated that the overall environmental conditions were the same might imply a negative attitude towards or dissatisfaction with the environmental conditions. That is, although KIP has improved the overall environmental conditions of the kampungs (see below), indications are that residents do not consider the improvements, and hence the environmental conditions, to be completely satisfactory.

2.19 Each of the interviewers also had to provide observations about the neighborhood facilities nearest to the interview site, as well as overall environmental conditions. For the most part, neighborhood facilities were classified as "good" by expert observers, regardless of whether the facilities were improved under KIP. Residents and expert observers thus concur that facilities and conditions have improved. Of specific facilities, footpaths, lighting, and education and health facilities had improved according to respondents (except in the non-KIP kampung in Surabaya). But almost 90 percent of the residents of the non-KIP kampung in Jakarta were dissatisfied with sanitation facilities. Garbage collection was cited as a particular problem by many residents. Up to 15 percent of the residents in some kampungs believed that garbage collection facilities were worse now than they were before the improvement programs were implemented. Perhaps these residents, whose garbage is collected just once a week, want more frequent service, and this is the source of their dissatisfaction. But the interviewers also cited the poor quality of garbage collection in all cities and kampungs–particularly in Denpasar, where almost 50 percent of the observers cited that

garbage collection was poor. Overall, cross-check of the responses of residents and the observations of interviewers showed that their rating of facilities agreed in the majority of cases.

2.20 Residents were also asked to identify the public programs that contributed to improvements in their kampungs–either the KIP or a series of non-KIP programs (Table 2.4).[2] About 68 and 60 percent of the respondents in improved kampungs in Jakarta and Surabaya, respectively, responded that KIP was the main contributor to the improvements. Conversely, only 28 percent of the Denpasar KIP kampung residents attributed the improvements to KIP; more than half (56 percent) did not answer this question. Residents in non-KIP kampungs in Jakarta and Surabaya attributed improvements in their kampungs largely to other community participation programs (88 and 70 percent, respectively).

Access to Drinking Water

2.21 The majority of residents in KIP kampungs have water piped into their homes–an improvement that can be attributed, in part, to KIP.[3] Residents of non-KIP kampungs rely heavily on street vendors. But many residents in both the KIP and non-KIP kampungs also use groundwater from wells–which is polluted in many cases by the salinity of coastal aquifers. Thus, universal access to safe water is still a major problem in Indonesia's urban centers.[4] A clean supply of surface water has major health benefits. It also reduces the extraction of groundwater, reducing the health risk from polluted wells where they are used as the main water supply.[5] Thus, in some kampungs, people may have to be persuaded to start paying for their water supply despite the availability of a free supply of groundwater.

2.22 The survey asked residents which of four sources of water (private and shared piped water, well water, water from street vendors, and water from their neighbors) they used for two purposes: drinking/cooking and bathing/washing (table 2.4). Although more than half of the respondents are supplied with clean water from water companies, many respondents also rely on water from other sources. For instance, about a third of the non-KIP kampungs rely on street vendors and/or neighbors, and respondents in all sites (except the non-KIP kampungs in Jakarta) rely heavily on well water. According to the SAR for Urban I (World Bank, 1974a), in 1976 about 50 percent of the Jakarta population relied on groundwater and about 40 percent on street vendors for their water supply. Thus, there has definitely been improvement on this account. The fact that none of the respondents in the non-KIP kampung in Jakarta use well water reflects its poor quality, caused

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2. Residents were given four choices of improvement programs: KIP, INPRES grants, DIP, and Swabaya Masyarakat (community participation programs). The latter includes a variety of small-scale programs organized at the local level and emphasizing community participation and donated kampung labor. They are common on a small-scale throughout the cities of Indonesia. Finances for materials may come from central or provincial grants to villages ("Bangdes" or INPRES Desa) or may be collected from among the kampung dwellers.

3. The first piped in water was brought in by KIP. Once the main pipeline was in place, it was easy and inexpensive to develop the system to provide supply to the individual houses. The KIP components of the four urban projects under evaluation also provided public water standpipes as a source of clean water for the kampungs. One of the survey households now use standpipes for drinking or cooking, and only one uses this public supply for washing/bathing.

4. Safe water is defined as treated surface waters available from either standpost or house connecting or untreated but uncontaminated waters, such as from protected springs.

5. A surface water supply also reduces subsiding urban land, damage to urban infrastructure, the incidence of flooding, and damage to fisheries when compared to groundwater supply.

largely by saltwater intrusion. Still another interesting finding is that the use of shared water from water companies seems to be a Jakarta kampung phenomenon.

Table 2.4: Program responsible for kampung improvements according to respondents *(percentage of respondents).*

Site of survey	*No. of respondents*	*KIP*	*INPRES*	*DIP*	*Community participation*	*No answer*
Jakarta KIP	50	68	18	20	26	2
Jakarta non-KIP	25	4	0	8	92	0
Surabaya KIP	50	60	2	6	48	20
Surabaya non-KIP	25	16	0	4	60	32
Denpasar KIP	25	28	12	0	16	56

Note: Because residents could respond to more than one option, totals do not sum to 100%

Table 2.5: Source of water for cooking/drinking and washing/bathing *(percentage of respondents).*

City site	*Private water company supply*	*Shared water company supply*	*Well*	*Purchased from street vendor and/or neighbor*
Jakarta				
Tanah Tinggi (KIP)	72	8	32	12
Manggarai (KIP)	24	4	72	4
Penjaringan (non-KIP)	80	8	0	40
Malaka Sari (sites and services)	83	0	50	0
Surabaya				
Sawahan (KIP)	56	0	48	36
Genteng (KIP)	80	0	64	16
Jagir (non-KIP)	56	0	60	32
Denpasar				
Dauh Puri (KIP)	44	0	76	0
Tegal Kerta(sites and services)	100	0	0	0

Note Some kampung residents use more than one source of water.

2.23 It is interesting to note that despite the availability of safe piped drinking water from private companies, many residents are still relying heavily on well water (as in Manggarai, where KIP did not provide water connections and during our studies field work, residents frequently complained about the bad quality of public water). This may reflect the perception by many of the interviewed residents that piped water is of poor quality (taste and smell) and quantity (low levels of availability). This is a phenomenon occurring in both KIP and non-KIP kampungs and also in the sites and services areas. However, there is a difference between KIP and non-KIP kampungs when we consider the number of people still relying on street vendors, usually a more costly option *(Table 2.6)*.

Table 2.6: Percentage of households that buy water from street vendors, by KIP and non-KIP

Site	*Jakarta*	*Surabaya*	*Denpasar*
KIP kampungs	10	6	0
Non-KIP kampungs	36	28	0

Note No sites and services area residents answered positive to this question. Table 2.5 aggregates water purchased from street vendors and neighbors.

Sanitation

2.24 The type of toilet and its ownership differs significantly between the Jakarta KIP and the Jakarta non-KIP kampungs. Differences between the Surabaya KIP and non-KIP kampungs and

among the KIP kampungs in the three cities were not significant. By far the majority of kampung residents have privately owned closet toilets with septic tanks. This is a great improvement, at least for Jakarta where, according to the SAR Urban I (World Bank, 1974a), most houses flushed their sanitary wastes into open ditches along the roadside. Furthermore, this improvement in private toilets has been sustained more effectively during the project period than have public/community sanitation facilities (MCKs) as discussed later.

Solid and human waste disposal in inner-city waterways is a major problem.

2.25 However, toilets in many households in Jakarta and Denpasar still empty directly into canals or rivers. In the Manggarai KIP kampung in Jakarta, where a KIP footpath was constructed in the front of the houses, the toilets at the back often emptied into the canal. Additional information from group interviews showed that many septic tanks are rarely emptied, suggesting that they may be leaking into and polluting the soil and groundwater, or overflowing into drainage ditches, posing serious health hazards, especially during the rainy season. Similar conclusions were reached by a recent study on the quality of the water supply in Surabaya (Collier and Santoso, 1992).

Daily flooding in Penjaringan, a non-KIP kampung.

2.26 Urban I and II proposed that community sanitation facilities (MCKs) be built. Only about 25 of the respondents indicated that they use MCKs (13 percent of all residents). Eleven of them live in the non-KIP kampungs of Jakarta (provided by a private entrepreneur) and seven in one of the KIP kampungs of Surabaya showing the lack of success of this component.

Drainage/Flooding

2.27 Improved drainage has helped reduce flooding–a direct impact of KIP investments: 61 percent of the respondents in the KIP kampungs said that they had no flooding in or outside their homes, compared with 32 percent of respondents in the non-KIP kampungs. Furthermore, 80 percent of the residents in Jakarta non-KIP kampungs said that there they have an open drainage

system (or no drainage system at all) near their dwellings, and that they have monthly or yearly flooding problems. However, conditions in one of Surabaya's kampungs have reportedly deteriorated, in that drainage levels and backlogs have occurred at the entrance to the main drain since KIP was implemented.

2.28 The KIP in Denpasar was implemented during a period of rapid development, when much of the land was being converted from rice fields into housing and commercial areas. The construction of roads and drains at this time was vital to reducing environmental problems associated with access and flooding. Other environmental problems have emerged in Indonesian urban areas where canals and rivers are widely used for the disposal of rubbish and sewage. During periods of low flow, backups occur because the drains are not cleaned regularly. The survey in the sites and services areas did not indicate any flooding or drainage problems.

Indirect Impacts Around Improved Areas

2.29 Areas outside the sites and services program areas were visited in both Jakarta and Denpasar. In both cases, but particularly in Denpasar, the indirect impacts of the project were clearly visible. In Denpasar, the sites and services area is near the center of town, but on the other side of the river. There was no bridge before the project, and the journey to town was quite far despite its proximity. A bridge was constructed as part of the urban project, and the entire area has opened up, and hastening the rate of economic development. Not only has the sites and services program brought in a new population of consumers, it is also close enough to the center to make it accessible to consumers. Many shops and food stalls have opened up, and several motorbike shops and workshops have opened up along the road adjacent to the sites and services. The active construction has attracted many migrant workers, who have since settled on the land around the project area. Maybe the largest gains were made by one of the original farmers who owned rice paddies in the middle of the proposed site. He refused to sell his land, and the sites and services area was built around rice paddies. Ten years later, he divided the land up into plots, on which some large houses are being built.

2.30 In Jakarta, many original residents still live around the site. They say that they have been able to benefit from a more active economy and that they now have plenty of work opportunities. If they want to work outside the area, they now have access to public transport systems. In Surabaya, KIP did stimulate improvements in individual housing, more than the public housing delivery program, which is much more expensive. KIP is apparently a housing "delivery" program, providing high-quality housing at almost no cost to public resources.

Conclusions

2.31 Considering the complexity of urban processes in an eighteen year period, it is difficult to demonstrate with certainty the magnitude of housing and environmental improvements, at the kampung level, that were a direct or indirect impact of the KIP, or of other components of the four urban projects under evaluation. The time that has elapsed since KIP was implemented and the country's economic growth also help explain why improvements in the dwellings and community infrastructure of most non-KIP kampungs have caught up to those in KIP kampungs. As was mentioned in chapter 1, the macroeconomy in Indonesia during the appraisals of Urban I-IV was buoyant, with a rising GDP per capita and falling inflation. As households have greater income, they invest more in shelter. As per capita GDP increases, the total value of housing and domestic assets associated with the median household in the country also increases.

2.32 Given improved economic conditions in the country, we can assume that the post implementation period for the four projects was one in which both KIP and non-KIP kampungs would have improved as well. However, the time periods in which the KIP and non-KIP kampungs achieved their improvements differed. The conditions in KIP kampungs differed widely from those in non-KIP kampungs immediately after the KIP was implemented. Thus, the projects succeeded in impacting the quality of housing and the environment in the kampungs where they were implemented. As shown in this chapter, indicators for the improvement are provided by overall housing quality, living dimensions and amount of residents investments. We found that the level of improvements and the amount of investments are more significant immediately after project investments. Subsequently, the improvements and investments level-off and other kampungs, not under KIP evolve to achieve similar conditions. Our sources emphasized the importance of the KIP experience as a prototype for investments and improvements in other areas.

3. Persisting Environmental Degradation in Urban Areas

At the citywide level, environmental conditions have deteriorated particularly in areas where rapid population and economic growth has increased the demand for urban infrastructure services. Despite the improvements effected by KIP under Urban I-IV, the environment in major Indonesian cities continues to deteriorate, exacerbated by population growth. The urban environmental challenge in Indonesia today is far greater than it was when Urban I-IV were implemented, and much must still be done to head off the collision course between urban growth and environmental conditions: for example, Denpasar, an area of rapid urban growth, exhibited very bad solid waste management practices. Drainage was not integrated with road upgrading causing flooding problems after roads were raised higher than house floors (Jakarta and Denpasar). In addition, drainage systems were not connected with broader infrastructure causing backlogs at the entrance of the city wide drainage systems, increasing flooding and breeding grounds for disease-carrying insects (Surabaya). At both the kampung and citywide levels, the projects did not foresee some future environmental problems, such as increased traffic congestion and air pollution. And although the design standards of KIP, such as the width of footpaths, has helped increase access to fire-fighting units, the use of modern flammable building materials and overcrowding have increased the risk of fire.

The Problem

3.1 In the past 25 years, Indonesia has achieved remarkable success in such areas as income levels, the reduction of poverty, life expectancy at birth, and the coverage of primary education. But environmental conditions of urban centers have deteriorated sharply in recent years as portrayed in a recent Bank report: *Indonesia. Environment and Development: Challenges for the Future* (World Bank, 1994a). The report suggests actions by the Bank and Indonesia's government to address the dire problem (box 3.1). This chapter should be a reminder that, although the government's urban development policy and urban projects I-IV have dramatically improved conditions in low-income urban areas, much must still be done at both the kampung and citywide level to address the sensitive balance between complex urban services and a delicate environment.

3.2 The previous chapter analyzed the impacts of the four urban projects at the scale of kampungs and neighboring areas. Some components of these projects, such as solid-waste management and drainage and flood control programs, were designed to have an impact at the citywide level. This chapter explores the current environmental conditions of urban centers where those components were implemented. It also addresses other environmental problems that have emerged as the urban development agenda policy has been implemented. We will evaluate the impacts of these projects on the environmental components and present environmental conditions on the basis of primary and secondary data (maps, reports, and interviews) at the city-wide level.

Much Must Still be Fixed: Solid-Waste Management, Drainage Networks, Flooding Risk, and Water Quality

3.3 As discussed in chapter 2, physical improvements in such areas as garbage collection, sewerage, and drainage were crucial components of the urban projects. Although some of these "facilities" were improved in the kampungs, they fell far short of meeting any standards for environmental quality.

Box 3.1: Environmental Conditions in urban areas

The recent Bank report Indonesia. Environment and Development: Challenge for the Future (World Bank, 1994e) reached three major conclusions:

1. Indonesia's economic growth will be predicated on its industrial growth, in turn spurring growth in urban areas.
2. Air and water pollution in urban areas is projected to increase considerably, posing formidable challenges to controlling emissions. But because most of the pollution in the future will come from households or industries that do not yet exist, the incidence of environmental hazards can be controlled and prevented.
3. Natural resources have been an important source for economic development in the past 25 years. They will become even more important in the next 25 years. Conflicts over the use of land, water, and forestry resources will become increasingly fiercer.

Both Indonesia's government and the academic world have increased their recognition and awareness of these issues in the past 10 years. These issues were not part of the urban agenda at the time the urban projects were implemented. Looking to the future, the Bank report on the environment and urban development provides the following recommendations:

- Future initiatives should build on existing government processes and institutions.
- The gaps that still exist between Bank and government strategies toward the environment and decentralization should be narrowed
- A better understanding of Bank and government rules and regulations should be reached.
- Government initiatives in community participation should be encouraged further.
- Local governments will require more resources.
- Methods for storing institutional memory and baseline data should be developed.

Solid-Waste Management: A Growing Health Hazard

3.4 *Context.* Solid-waste management—in-site waste collection, transportation, and disposal—is a critical problem in Indonesian cities. At the local level and in our survey, many residents complained about the irregularity and poor quality of collection services, which is due in part to the wide range of collection services found at the community level. In particular, inefficient fee collection adversely affects service performance. Poor solid-waste management practices create breeding grounds for disease and groundwater contamination. In waste dumping sites, surface drainage, leachates, and methane gas and pest generation are uncontrolled and little, if any, additional mechanical compacting is undertaken. Land suitable for landfill sites is becoming scarce. But despite the presence of scattered waste and smells from decomposing garbage, the public continues to dump solid waste in open areas, rivers, and canals.

3.5 According to a recent Bank report (World Bank, 1993), waste generation in Jakarta increased by 6 percent annually between 1980 and 1990, to an estimated 21,900 m^3 daily. In Surabaya, waste generation is expected to increase at a rate of about 5 percent from 1990 to 2000, from its current estimate of 5,000 m^3 daily. In Jakarta, according to the same report, as many as 26 percent of the households are reportedly dumping their garbage at random; as many as 18 percent are burning their garbage. Another 15 percent of households are composting and burying their solid-waste disposal. JICA (1987) estimated that about 40 percent of the waste generated in

Jakarta in 1986 ultimately found its way into informal sites, and as much as 30 percent reached rivers and canals. About 50 percent of the solid-waste in Jakarta is generated by households.

3.6 In Surabaya, the World Bank (1993h) reports that as much as 15 percent of solid waste goes uncollected, and an additional 16 percent is collected but disposed of in "unidentified places." But Surabaya has achieved some success in cost recovery for solid-waste services, recovering 30 percent of its allocated solid-waste management budget. About 70 percent of the solid waste is generated by households.

The waste in this landfill, near Surakarta, Java is not mechanically treated or compacted.

3.7 Evaluation Results. With its community participation and ownership components, KIP provided households with incentives for handling their solid waste, more judiciously, serving as model for more efficient collection in wider areas. Today, according to our survey, most residents use private or shared bins, although many residents complain about the quality of collection services.

3.8 The largest visible difference in solid-waste management was found not between KIP and non-KIP kampungs but among the three cities (table 3.1). The three kampungs in Surabaya were far cleaner than those in Jakarta—primarily because a greater percentage of people in Surabaya use shared bins. In fact, Surabaya has won several national and international awards for the cleanliness of its streets.

Rubbish is dumped without authorization into the river in Central Denpasar, Bali.

3.9 Exacerbating the problem of solid waste management in kampungs are the high prices charged for garbage collection (about Rp 1,300/month (US$0.45) in both KIP and non-KIP kampungs). Many people simply choose not to pay, especially in the many sites where garbage disposal is encouraged by owners in order to build up their land (Chapter 5 discusses the free-rider issue in more depth).

Table 3.1: Methods of Waste Disposal
(percentage of respondents)

	Private Bin	*Shared Bin*	*Pit*	*River*	*Other*
Jakarta KIP	86	12	2	0	0
Jakarta non-KIP	68	32	0	0	0
Surabaya KIP	40	58	0	0	2
Surabaya non-KIP	72	24	0	0	4
Denpasar KIP	68	8	4	8	12
Sites and Services	100	0	0	0	0

3.10 *Solid waste component in Denpasar.* A visit was made to the landfill site outside Denpasar, one of the components of the citywide improvement

program.[6] Its most striking feature was the absence of any facility for treating or detoxifying the leachate from it. The black leachate seeps out into drains, where it accumulates until either high tide takes it out to sea or rainwater washes it there. The section of the coastline where the landfill is located is situated just around the coast from Sanur beach, a major tourist resort. One of its greatest negative impacts is on the coral that grows along this part of the coastline; much of it has already been killed by pollution. The coastline is currently being replanted with a specific type of mangroves, which are more tolerant to the effects of pollution. The impact on the rest of the coastal ecology is unknown.

3.11 Denpasar exhibited the worst solid-waste management practices, which seemed to be due to a lack of awareness by the community. In fact, the Denpasar kampung has the fewest number of residents who use bins, either shared or private. Impeding Denpasar's waste-management process is the amount of land that is currently being converted from rice paddies into other uses. Many owners are trying to raise the levels of their lots to stop flooding. They thus allow, and even encourage, their neighbors to dump rubbish there as fill. For instance, in Bali, we asked one long-time resident why people threw so much of their rubbish in the river. He replied that it no longer mattered, since the rice paddies downstream had disappeared. His statement was ironic, considering that the river empties onto Kuta beach, where the current money earners of Bali swim. But it also reflects public lethargy about solid-waste management.

3.12 Another interesting feature of the landfill is the recycling system. Hundreds of scavenger families have moved over from Java and earn income by recycling the solid waste disposed here (see box 3.2). The scavengers have contract agreements with sanitation department truck drivers for scavenging along specific routes. The most prized routes are those that run past large tourist hotels. Prime items for collection include plastic film containers and shampoo bottles. In light of the absence of sanitary landfills, the scavengers are reducing the amount of landfill by recycling some garbage. However, the authorities are reluctant to acknowledge that they exist. Hence, they are left outside administrative boundaries and have little or no access to even the most basic services, such as schools and clean water.

Drainage Systems and Open Sewers

3.13 *Context.* Drainage in urban centers creates human- and solid-waste management problems, because most drainage channels function essentially as open sewers. According to the World Bank (1993h), four factors are responsible for the dearth of adequate drainage systems: (1) few central sewage collection systems are available; (2) the on-site sanitation facilities used by urban households are poorly designed and maintained; (3) residents dispose of "grey matter" (kitchen and bath waste water) into open drains; and (4) solid-waste disposal is uncontrolled.

3.14 The 1989 National Social and Economic Survey of urban households on "ditch water conditions" found that nearly 30 percent of households either do not have a drainage ditch or have a ditch with stagnant or slowly flowing water at their houses. In fact, the survey found that nearly 30 percent of urban households complain of "stagnant water and garbage odor" in the vicinity of their residence. Furthermore, a 1992 survey of kampung residents found that one of the main environmental problems in kampungs was indeed blocked drains (PT, Intersys Kelola Maju, 1992).

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[6]. In addition to the solid-waste management component of the citywide improvement program in Denpasar under Urban IV, the project included finding for extending the water supply system in Bali. This component was not evaluated.

Box 3.2: Environmental Jobs?

Mr. Agus, his wife, and four children arrived from Java three years ago. They live in a temporary house at the edge of the landfill site. He pays Rp.75,000 each year to rent the land from the owner. Land is becoming expensive with the arrival of so many scavengers; this is the third house he has built, because high rents forced him out of his two previous houses.

Mr. Agus has a contract with a local chicken farmer, whereby he buys the truckload of feathers that are brought to the site. He then dries the feathers, repacks them, and resells them to the farmer to be used as feed. His children also help scavenge for sellable goods on the landfill tip. He says that they can earn more money on a regular basis here than they could as landless farm laborers in Java. They do not have a supply of clean water, and must travel a long way by bicycle to fetch it. The drain that is filled with black leachate at the back of the house is their toilet. Mr. Agus's wife shops in Denpasar and if the children are ill she takes them to the hospital. Because they do not belong to a village, they cannot join the family welfare clinics. Last year when the tip was on fire for months at a time, all the children became sick with chest infections. The children do not go to school. Despite everything, they feel that they are not too badly off. They can save enough from their scavenging to take the entire family back to Java once a year.

3.15 *Evaluation Results*. After road levels were raised under the KIP in Tanah Tinggi (Jakarta) and Banjar Busung Yeh Kaning (Denpasar), many kampung residents reported that the level of their house was lower than the level of roads; thus, despite the new drains, rainwater drained into their homes. To overcome this problem, they raised the level of the floor in their houses. They also encountered additional problems when the flow of canals and rivers, which are widely used for rubbish and sewerage disposal, was low. Because drains are not cleaned out regularly, they frequently become blocked.

Flooding Risk

3.16 *Context*. Flooding in the mostly low-lying urban centers of Indonesia is another environmental hazard associated with the drainage problem, primarily because the drains are not maintained properly. In addition to the health hazards posed by flooding, as water contaminated by solid and human waste comes into direct contact with households and creates water pools that breed disease-carrying insects, flooding causes extensive damage to property and leads indirectly to lost income.[7]

3.17 Another reason for the high risk of flooding is the topography of many urban areas. According to a DKI Jakarta study, about half of the city of Jakarta is located in Zones I and II, where "urban development should be avoided."[8] The map at the end of the report presents a striking view of flooding risk for the city in addition to other physical constraints for development.

3.18 *Evaluation results*. Reduced flooding has often been cited as one of the major benefits of KIP. A positive impact however was not achieved in all sites. Residents in one of Surabaya's kampungs consistently reported that conditions have deteriorated since KIP, because a change in drain levels creates backlogs at the entrance to the main drain. In two impact evaluations of

[7]. Flooding cost the city of Jakarta an estimated Rp.47 million in 1988 (JICA, 1991), partly because the drainage network was reduced to 2 percent of the total area, far below the estimated 7 percent that should be reserved as waterbodies given the urban topography of Jakarta

[8]. DKI plans for new guided development areas are not located in this area (DKI, 1991)

kampung development, one of the criticisms leveled at KIP was that improvements in one area had a negative impact on residents in neighboring areas (LP3ES 1981a, 1982g). For instance, in areas where the drainage infrastructure was improved, its contents emptied into an area that did not yet have a drainage system. Thus, some of the improved infrastructure was not integrated effectively with broader infrastructure.

The Quality and Quantity of Water in Urban Centers: Another Sign of Environmental Deterioration

3.19 *Context.* One of the major problems with the quality of water in Indonesia is the concentration of fecal contamination from human waste and toxic metals from industrial sources that reach the groundwater. In fact, most sources of ground and surface water in Indonesia are not safe for drinking. A survey of about 30 shallow wells conducted in the dry season of 1989, primarily in north and central Jakarta, showed that all but two had signs of fecal contamination, and 73 percent had traces of ammonia (World Bank, 1994b). Tapwater samples taken in Jakarta in 1992 revealed a 73 percent rate of coliform contamination, with a 55 percent rate in drinking water from wells.

3.20 The quantity of water is also becoming scarce. The heavy reliance on groundwater by industries and households in large urban areas, particularly in the cities of the north coast of Java, cannot continue indefinitely (World Bank, 1994b). The current level of groundwater extraction in Jakarta, for example, is causing saltwater intrusion into aquifers that extend up to 15 km south from the coast, as well as land subsidence of between 4 to 9 cm annually, endangering the structural stability of buildings. In addition, the demand for water in Jakarta exceeds the supply of the city's water authority. A recent law adopted by the DKI Jakarta government to allow the construction of high-rise buildings of up to 60 stories will present challenges to both structural engineers and water-resource specialists. Other problems with water supply include increased flooding and waterlogging, and the aggravation of groundwater pollution from septic tanks and leaching pits.

3.21 *Evaluation results.* The choice between well water and piped water was discussed in chapter 2. The conclusion was that KIP was in part responsible for increasing the number of private houses with piped water. Some communities have no option but to use the piped water supply; in those kampungs, the impact of water provided by KIP was significant. However, other communities have a choice in the form of well water.

3.22 According to our survey of kampung residents, many seemed unconvinced that piped water is better than well water; recent studies have shown that, indeed, the quality of well water is still poor (box 3.3). But the smell, taste, and color of piped water is sometimes unpleasant. In addition, many respondents complained that the pressure was so low that they could get little water during the day and had to get up at night to fill buckets and containers. According to our survey, about 70 percent of all households believe that the quality of their water is "good." About 40 percent of KIP kampung residents in Jakarta and Surabaya whose main supply of water comes from water companies rates the quality of the water as medium or poor.

Box 3.3: Pollution in Urban water supplies

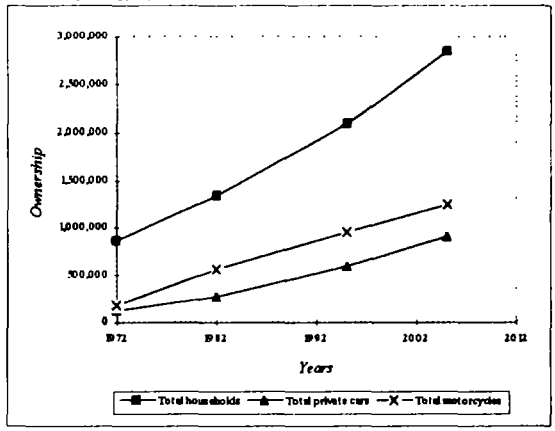
According to a study by JICA, all but two of the 30 shallow wells examined in different parts of Jakarta during the dry season of 1989, showed signs of fecal contamination, and 73 percent had traces of NH_4. Thirteen percent of the samples contained traces of mercury. Tapwater sampling in Jakarta in 1992 revealed that 73 percent was contaminate with coliform (Surjadi, 1993). Tapwater sampling in Surabaya in 1990 showed that 55 percent exceeded the total coliform standard for treated water (Crooks, 1991).

Perception of Water Quality

The women in Kampung Kebun Pisang, Manggarai, told us that they drank well water because they did not trust the water company: "We cannot see what they put in it – we can smell the carborite, but we don't know whether it is really safe, or what else they may have put in. Our well water comes from the ground. It tastes better, and there is no one down there adding things to it."

3.23 The provision of water to inner-city areas is no longer a social issue pertaining to improved public health; it is also a rapidly increasing environmental issue associated with the impact of groundwater substraction and saltwater intrusion into the groundwater system in coastal areas. Until recently, water companies were regarded primarily as providers of water to those who needed it. It is becoming increasingly important for the companies to sell their services, and to persuade customers to choose piped water over well water. The large percentage of residents who have piped water supply but still use wells as a free alternative for washing and bathing indicates that a substraction fee should be imposed on well-water use in order to control its supply. Water companies must consider marketing clean water by improving service and quality and running public-awareness campaigns before the groundwater supply is depleted.

Figure 3.1: Estimates of privately owned motorized vehicles between 1972 and 2005, DKI Jakarta.

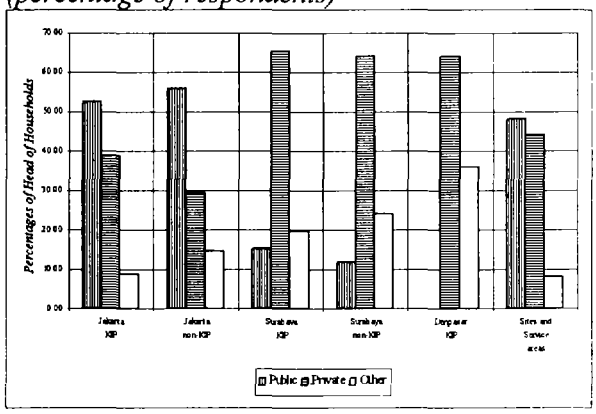


Emerging Environmental Issues

3.24 The KIP did not, and certaintly could not factor in, future environmental problems, such as increased traffic congestion and air pollution, at both the kampung and the citywide level. And although the design standards of KIP, such as the width of footpaths, has diminished the risk of fires in some areas, overall, the use of modern flammable building materials and overcrowding has increased the risk of fires.

A Product of Economic Development: Vehicle Ownership on the Increase

Figure 3.2: Mode of Transportation Used by Head of Household to Get to Work
(percentage of respondents)



pollution hazards that will increasingly damage the health conditions of the population and corrode buildings in urban areas.

3.25 According to estimates by DKI Jakarta (DKI, 1991) the mode of travel in, for example, Jakarta will shift in the next 20 years from 48 percent private and 52 percent public (1982) to 70 percent private and 30 percent public, implying a 255 percent increase in the number of privately owned vehicles by the year 2005. Figure 3.1 shows the projections estimated by DKI Jakarta. In fact, the percentage of privately owned vehicles among the population of Jakarta has increased significantly since 1972, and the projections for the year 2005 are considerable, particularly for cars (figure 3.1). Throughout all urban areas in Indonesia, about 30 percent of households own a motorized vehicle (either motorcycle or car), and this percentage is much greater among "higher" income levels: about 85 percent of the urban households earning more than US$3,000 per year own a motorized vehicle.

3.24 *Context.* As the urban population of Indonesia has increased, so too has the ownership of motorized vehicles in urban Indonesia. In turn, traffic congestion has increased, because the road network has not been expanded commensurately. Increased traffic congestion is creating air

Motorbikes and cars often cause congestion on KIP roads.

Overcrowding in kampungs creates a serious fire hazard

3.26 Evaluation results. The mode of transportation used by household heads to get to their workplace differs significantly between Jakarta and Surabaya. Residents in Jakarta rely much more heavily on public transportation; residents in Surabaya and Denpasar rely largely on private vehicles, now the main form of transportation to the workplace (Figure 3.2).

3.27 Motorbikes are the prominent form of privately owned vehicles in all kampungs *(Figure 3.3)* due primarily to the prevalence of pathways that cannot accommodate cars. But many residents throughout all kampungs (except Kedung Doro, Surabaya[9]) do own cars. For instance, 20 percent of the residents in the fringe kampungs whose roadways are wide enough to accommodate four-wheel vehicles do own cars. Many residents are thankful that the many pathways block access by cars which they see as dangerous, noisy, and polluting. Only 3 of the 29 car owners in the entire survey park their cars away from their houses; all others try to park on the narrow roads or pathways near their houses, compounding congestion. All three lived in non-KIP kampungs.

3.28 Out of the 29 car owners, 18 live in KIP kampungs. Location of their residence is not related to owning a car. In fact, the same number of residents that said owned a car lived next to the vehicle roads or to the pathways (table 3.2). Car ownership can be contemplated only by those in higher income brackets. Based on a suggestion that higher-income families would be encouraged to settle in the area if roads were constructed, we cross-checked income with location; and found that the income profile of residents living by vehicle roads or footpaths are basically the same. Likewise, the number of years in residence and location did not reveal a significant relationship. The analysis does not provide evidence to confirm the hypothesis that roads will attract higher-income families. The increase in the ownership of motorized vehicles is related to the general increase in income of current kampung residents.

Figure 3.3: Ownership of motorized vehicles *(percentage of respondents)*

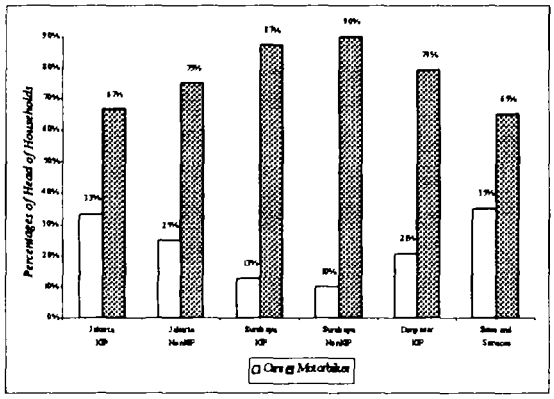


Table 3.2: Profile of residents according to where they live (KIP kampungs only, all cities aggregated) *(percentages)*

	by vehicle road	*by pathway*	*interior*
Car owners	50%	50%	0%
Income ('000 Rp.)			
150-300	19%	18%	20%
300-600	45%	43%	80%
more than 600	29%	38%	0%
Moved into kampung			
before KIP	25%	70%	5%
during KIP	22%	78%	0%
after KIP	11%	89%	0%

Fire Risk Assessment: The Cost of Lives and Residential Damage

3.29 Fire is a major concern in overcrowded inner-city kampungs. Within the past three or four years, five large fires have destroyed areas either within or close to the areas surveyed. Two of the fires destroyed marketplaces (Blauran in Surabaya, and Malaka Sari in Klender housing estate in Jakarta). The causes of the fires were often cooking stoves or poor electrical wiring, exacerbated by flammable building materials and overcrowding. For instance, on July 11th, 1994, the *Jakarta Post* reported a fire in Kebun Kacang, Jakarta (a KIP kampung not surveyed): "The fire was started by the explosion of a kerosene stove at the house of a food vendor." The fire brigade reported that they "had difficulty extinguishing the fire because the road to the site is very small." Nineteen homes were destroyed.

[9]. Residents of this kampung have banned access by four-wheel non-emergency vehicles, despite the fact that the roads are wide enough. The primary reasons are to reduce road maintenance costs, and to preserve a pleasant and safe environment for the majority of the population. The opinion in the kampung is that a few car owners can have a negative impact on many people, and that the interest of the majority should be considered.

3.30 Improved building materials in houses and the construction of kitchens inside homes has helped reduce fire risks—a direct result of the KIP. However, many issues must still be resolved, such as overcrowding. But the most important issue is roadway access for fire engines. Kampungs are already overcrowded and the footpaths are too narrow to make this option possible without damaging and appropriating property.

Conclusions: To the Future

3.31 The environmental conditions of urban centers in Indonesia are lagging behind the country's strong economic development. The KIP component has created an island of micro-environmental improvements, surrounded by deteriorating conditions at the citywide level—particularly in urban areas whose rapid population and economic growth will increase the demands for urban resources. The environment and urban growth will reach a collision course if no measures are taken.

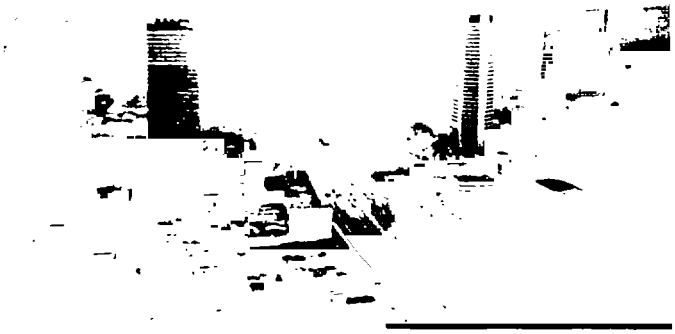
3.32 The worse scenarios of environmental degradation are forecast if a business-as-usual attitude is taken towards the section of the population that will cause the greatest environmental damage: future households not yet formed. The incorporation of minimum environmental standards in all future projects is a must. Newer urban projects must address the growing environmental crisis head-on by establishing minimum environmental standards—setting targets for reducing specific water-born pollution in water courses or the emission of air pollutants, for example. An important opportunity now exists for changing the course of collision between environmental degradation and urban development.

4. Rapidly Emerging Real Estate Markets: Supplanting Existing Kampungs

The study attempted to address two project-related questions arising from the rapid transformation of urban areas: (i) are kampung residents benefiting from the investments? and (ii) does the demolition of improved kampungs signal the failure of the Urban I-IV projects? The study's findings were that residents did gain some benefits, but would have enjoyed more if their property rights had been more secure. The study also found that, because such large benefits flowed from KIP, initial project investments could still enjoy economic rates of return of 12 percent, even over a useful life of only five years. Some of the beneficial impacts of the Urban I-IV projects have been swept away by the demolition of improved kampungs to make way for modern urban development in strategic locations in many cities of Indonesia. The rising demand for urban land in a rapidly growing economy such as Indonesia's is likely to make the redevelopment of kampung land into commercial and up-market residential real estate increasingly common.

Kampungs that have Disappeared

4.1 A rooftop view from any one of the modern skyscrapers that tower over Jakarta's central business district - known as the Golden Triangle - instantly reveals that most of the 180 hectares of kampungs improved under Urban I and Repelita I in the 1970s no longer exist in the area. In their place, high-rise commercial buildings and luxury apartment complexes have created a new physical profile of the heart of the modern megacity that is now Jakarta. Does this mean the Urban I-IV project impacts failed?



In the Golden Triangle luxurious high-rise buildings coexist with surviving kampungs.

4.2 Indonesia's sustained and rapid economic growth since the appraisal of Urban I in 1973, and the consequent growing demand for serviced land in the country's prosperous cities, has made urban land in prime locations very valuable. According to real estate developers active in the market, sites within the Golden Triangle can change hands for US$1,500 per square meter or more. More than anywhere else, Jakarta's, Golden Triangle - its transformation and growth - illustrates how the circumstances of urban Indonesia today differ considerably from those prevailing when Urban I was appraised more than 20 years ago (for an example outside Jakarta see box 4.1). Cities themselves house fewer poor

today. The 1974 working assumption of Urban I's appraisal that Jakarta was "one of the largest and poorest cities in the world" (World Bank, 1974; para. 2.01) is no longer valid for a city where only 7.8 percent of the population lives below the poverty line (Biro Pusat Statistik, 1991).[10]

Box 4.1: An example of kampung renewal outside Jakarta: The Bumi-Hyatt in Surabaya

Professor Johan Silas of Surabaya University's Institute of Technology has described the dynamics surrounding the displacement of former kampung dwellers (Silas, 1992). During the hotel construction boom of the late 1980s in Indonesia, owners of the existing Bumi Hyatt hotel near the city center wished to expand it with a 21-story tower block and annex on approximately one hectare of adjacent kampung land. The private developer hired by the hotel owners duly gave formal public notice of their plans, as required by law. Before that, however, the developer was actively acquiring kampung land from the individual owners on a plot-by-plot basis, in order to begin assembling most of the area required for the hotel expansion. Discretion was key to this phase of acquisition, largely undertaken through individual intermediaries. As news of the hotel's plans spread, sellers' asking prices for individual kampung lots rose. Before plans for redevelopment became known, the value of the kampung land was US$77 per square meter. On learning of the plans, some residents made what some officials considered to be "exorbitant" claims for compensation - up to four times this amount. In the end, most agreed to sell their plots for two to three times the original value, in addition to compensation for the appraised value of their house.* The developer was more than willing to pay the extra amount. After all, as an assembled unit, the site was estimated to be worth US$940 per square meter. At issue is how the value-added gains from this process are shared among stakeholders - that is, the kampung residents, private (and public) developers, and government at all levels.

* Professor Silas found that low-income families who receive cash payments as compensation were not skilled at managing their newly acquired fortunes. Many beneficiaries frittered away their settlements. As such, community education and support are clearly important components of any settlement arrangement in the future.

Land Value and Urban Renewal

4.3 Today, the value that real estate developers appraise for prime real estate converted from kampungs is thirty times the value of improved kampung land reported in the project PCRs Advertisements in Jakarta's *Properti Indonesia* magazine indicate that the prices for secondary residential land - defined as land outside but contiguous to the Golden Triangle - are approximately US$750 per square meter, still 15 times the price of former kampung land. Unfortunately, our study was unable to obtain data about the value of prime land in the 1970s and 1980s when Urban I-IV were being prepared.

4.4 Nevertheless, as part of their project design, Urban I-IV sought to increase land values by improving the infrastructure of the kampungs to which they were targeted. According to the project PCRs, these improvements led at most only to a doubling of land value (details in Table 4.1). Large differences between the land value of improved kampungs and the land value of prime real estate offer considerable scope for profitable private investment to transform kampung into modern serviced land through a process of urban renewal. Such renewal is already underway in many Indonesian cities, and is fully endorsed by the local authorities.

4.5 In Jakarta, for instance, local authority development plans call for the large-scale delivery of urban land to help meet the demands of a rapidly growing economy, despite the fact that practically none of the greenfield sites in the central areas of major cities remains unoccupied. The

[10]. The Golden Triangle covers 1,680 ha. of Jakarta's modern central business district, bound by the major urban throughways -Jendral Sudirman, Jendral Gatot Subroto and Rasuna Said. Now the focus of steel and glass skyscrapers of Jakarta's modern skyline, the Golden Triangle had only one high rise office building in 1973 when Urban I was appraised.

Jakarta 2005 structure plan estimates that 600 hectares of land will be required each year for housing development, social facilities, and infrastructure (DKI Jakarta, 1991). Sustained over the 25-year life of Indonesia's second long-term development plan, the forecast would mean that 15,000 hectares of urban land within the city limits would be required for modern urban development. Since this amount is more than the 14,531 hectares of open space/infrastructure land currently remaining in the city of Jakarta, much existing built-up land will have to be redeveloped (DKI Jakarta, 1984a). Urban kampungs are likely targets for renewal. Weaker land-tenure claims make it more difficult for kampung residents to resist renewal programs; low-income kampung areas also do not fit into the modern image of the city being projected by local authorities (Leaf, 1991).

How Kampungs are Renewed

4.6 Many private real estate developers already have considerable experience in acquiring kampung land for modern redevelopment. In selecting areas, developers apply the following criteria: (1) strategic location and access to a main road; (2) road frontage for commercial developments; (3) a developer's capability and ease of land release (funding, labor, and experience); (4) the potential and marketability of the proposed project; and (5) the level of compensation to be paid to the original residents. More peripheral kampungs can be affected by such major projects as shopping malls and high-income apartment complexes that can be located in secondary and suburban locations - for example, major highway intersections. The possibility of eventual redevelopment, even if not realized in the short run, helps bring kampung land into the overall property market in major Indonesian cities.

4.7 The process of land assembly and development for such projects in Indonesia would be familiar to real estate developers in other market economies, and involves the following steps:

- Reviewing local-city master plans and zoning ordinances for areas under consideration (designated commercial or mixed use is desirable)
- Verifying land tenure and identifying existing owners
- Checking government plans for KIP
- Initiating the purchase of land parcels one by one until 50 to 75 percent of the required total is assembled (to avoid speculation, no public announcement of the proposed project is made before this share of total land is assembled)
- Acquiring plots of land on the perimeter of a planned area first.
- Negotiating with remaining land owners - through the local leader (lurah) in most cases - to acquire the remaining land
- Finalizing development permits and so forth with local authorities

4.8 We had hoped that our study would shed light on what happened to former kampung residents after their areas were redeveloped. Preliminary inquiries in the Golden Triangle revealed how formidable the task would be. Some kampungs were removed more than eight years ago, and simply no trace of them exists today. Former residents have dispersed. Neither government agencies nor real estate developers keep records of erstwhile residents, nor of the physical characteristics of the area before redevelopment. Precise information on the number of urban kampungs that have been renewed to date in Indonesia is unavailable. Local officials of Jakarta informed participants of the Surabaya Impact Evaluation Workshop that as many as 40 percent of the city's kampungs have been renewed.

4.9 The demolition of kampung through urban renewal evidently interrupts the flow of benefits from kampung improvement, but this does not always mean that the project investment failed to achieve a satisfactory impact before renewal. At appraisal, Urban I-IV project investments were expected to generate benefits over a useful life of 15 years, yielding economic rates of return (ERR) in the 17-54 percent range (table 4.1). PCR re-estimates indicate ERRs of 26-31 percent. The associated large benefit flows can mean that a KIP investment under Urban I-IV was still worthwhile in spite of renewal taking place before its useful life expired. A simple sensitivity calculation will show that an investment yielding an ERR of 31 percent over 15 years will still achieve an ERR of 12 percent over five years, assuming that initial cost and annual benefits remain unchanged. This finding does not translate into a recommendation that kampung improvement should be planned for a shorter time frame, however. It simply affirms that, in spite of Indonesia's dynamic urban development that physically eliminated some Urban I-IV investments, most of those investments were worthwhile by virtue of the large benefits they already delivered prior to demolition.

4.10 An important caveat, of course, is who benefits from this process, a question to which the discussion returns at the end of this chapter. Also at issue is the displacement and process of rehousing former kampung residents who cannot afford to live in replacement projects that cater to high-income beneficiaries.

A view from the roof of the Hyatt Surabaya.

Emerging Real Estate Business

4.11 Private real estate developers are important actors in the process of kampung renewal in Indonesia's cities. The country's real estate sector has become an important business, responsible for investing US$1.7 billion annually (Info Paper Indonesia Property Magazine, 1992). Organized private developers were practically non-existent in Indonesia in the early 1970s. Urban I itself was responsible for creating and establishing the country's first developer -PERUMNAS- in 1973, but still firmly within the government sector. Later that year, the commercial association, Real Estate Indonesia, had 33 developers as its members. Today, membership runs to nearly 1,000 firms.

4.12 In a real estate market situation quite different from today's, the design of the Urban I-IV projects understandably focused upon the public sector contribution to urban infrastructure development. Today's concerns about managing infrastructure as a business with public-private partnerships were not high on Indonesia's urban development agenda in the 1970s.[11]

[11]. These issues are a key focus of the discussion in the World Development Report 1994 Infrastructure and Development (World Bank, 1994e) The private sector and real estate market forces nevertheless later came on to the kampung scene as Indonesia's cities prospered during a period of sustained economic growth.

Achievement of Intended Impacts

4.13 In terms of cost-benefit analysis, project investments in KIP were justified by the resulting increased land values following the improvements made. PCR observations of higher land values in improved kampungs than in unimproved ones confirm appraisal expectations.

4.14 Following standard procedures applied to the ex ante evaluation of all urban projects financed by the Bank, the appraisals of Urban I-IV used increases in post-improvement land value to measure the likely benefits of the proposed investments. Land values were expected to increase after infrastructural improvements were made, creating a greater demand (and thus willingness to pay more) for urban land with infrastructure services compared with urban land without services. In freely operating land markets with perfect information, the difference in price between the unimproved and the improved land should reflect the additional value that society at large attaches to what becomes an asset that yields more services. A basic premise behind this assumption is that the price of land itself represents the present value of a (perpetual) stream of rental payments that the land can be expected to command in the future. For this reason, this evaluation method involves estimating the imputed rent of a land parcel as the income stream over the life of the investment. The present value of that income steam corresponds to the value of the land.[13] Accurate empirical observations of land value changes are of course essential to achieving reliable project evaluations with this method.

4.15 Urban I-IV investments were evaluated in this way. Surveys were undertaken to compare the values of the land parcels to be improved with values of similar parcels - according to location, land use, topography, and tenure - but which had already been improved. Data on actual urban land prices, especially for kampungs, were updated from different sources. The Urban I and II evaluations were based on 1972 data from the Repelita I KIP program. For Urban III, a fresh survey was conducted in Jakarta and Surabaya in 1978. Finally, in 1988, government consultants collected extensive new data from many cities to provide information for evaluating Urban III at its completion. Key results are summarized in table 4.1.

4.16 The project data reveal several important facets of kampung improvement as real estate development operations. With PCR re-estimated ERRs of 26 percent for Urban II and 31 percent for Urban I and III, project KIP investments in Jakarta were worthwhile. The PCR re-estimates were higher than the SAR estimates for Urban I and III, namely 17 percent and 28 percent respectively. The SAR ERR for Urban II, at 54 percent, however, was considerably higher.[14] The observation that land values did indeed increase after infrastructural improvements is consistent with the findings of other studies of Indonesia. A hedonic index of housing value attributes constructed by Struyk (1990), for instance, found that the existence of streets, footpaths, and drainage was a significant attribute of housing values in Jakarta.[15]

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[13]. Walters (1983) and Mills (1972, especially chapter 3) provide detailed discussions of urban land theory.

[14]. The audit of Urban II concluded that the ERR for Urban II had been over-estimated at appraisal. (World Bank, 1986; para. 16)

[15]. To construct such a hedonic index, the study built an ordinary least squares multipl regression model to estimate the contribution of a range of housing attributes -such as those mentioned- to the values of a sample of housing units. Interestingly, the same study did not find that the availability of piped water had a statistically significant effect on house prices.

4.17 Another important aspect of kampung real estate revealed by the project data is the wide variance in land values within the kampungs between those located on more desirable plots (along roads) and those located on more inaccessible plots (inner kampungs). Even after KIP, the value of improved inner kampung land was much less than unimproved kampung land along roads (details in Table 4.1). This was true for all three projects and in both Jakarta and Surabaya. Thus, from a real estate development point of view, the greatest gains were made within kampungs by bringing road access to erstwhile inner kampungs.[15] This fact explains why residents and community leaders wanted to introduce as much road access as possible under KIP.

4.18 We found it difficult to update information on land values in the six kampungs we surveyed in Jakarta and Surabaya. Altogether, 35 percent of our respondents estimated the value of their houses, but did not know what the land by itself was worth.[16] This finding is not surprising, since open land parcels in densely settled areas of urban kampungs are rarely transacted without an accompanying house on the land.[17] Using Indonesian real estate developers' rule of thumb of attributing 20 to 30 percent of real estate asset value to the land, we applied the mid-range of 25 percent to disaggregrate the land element of the total value. Subject to this assumption, our survey produced estimates of real estate values that were compatible with earlier project data (Table 4.1).

4.19 However, much larger gains accrue from the annual appreciation of all property prices in major Indonesian cities in the past several years, until the recent slump. Dowall and Leaf's survey of land values in Jakarta, for example, found that informal (that is, kampung) land values in Jakarta grew by 11.8 percent annually in real terms during the 1987-89 period (Dowall, 1991). Sustained over the implementation period for Urban III (1979-87), this rate would have yielded land value increases of 144 percent - in other words, up to six times more than the gain from infrastructural improvement on its own.[18] Struyk reported an even faster growth in housing prices in Jakarta - 16.1 percent in real terms during the 1985-88 period (Struyk, 1990).[19] These studies, frequent press reports of soaring urban land prices, and conventional wisdom of Indonesia's real estate developers about the rising cost of land all point to the same conclusion. Broader market forces in the real estate sector are more important determinants of the land value of kampungs than are localized infrastructural improvements.

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[15]. According to the project data, land values of unimproved inner kampung sites would increase by 3 to 7 times if they were improved and given road access. Although such transformations were common in the KIP program, the project data do not admit this possibility. The data assume that along road, footpath, and kampungs the status of the plots does not change with KIP.

[16]. Our own survey identified median property prices reported by respondents (in 1994 rupiahs/m2) as follows: Jakarta: Tanah Tinggi 93,000; Mangarrai 92,000; and Penjaringan 123,000; and Surabaya: Sawahan 63,000; Jagir 51,000; and Genteng 115,000. Our study focused on the median values, since outlying reported values biased mean estimates. Only 10 percent of respondents were able to assess the proportion of their property value due to the land itself. The responses ranged widely, from 10 percent to 90 percent; we decided to disregard this information, preferring to use Indonesian real estate developers' rule of thumb that for residential areas (including kampungs) 25 percent of property value is attributed to the land.

[17]. Separating land values from building values is desirable from a theoretical point of view. Urban land as an asset has a unique property of delivering a flow of services in perpetuity. A building, as with other fixed assets such as a piece of machinery, has only a limited useful life, implying that its value will depreciate over time as it nears the end of its useful life. Although theoretically desirable, the separation is empirically possible only with a detailed property appraisal or the use of practical rules of thumb.

[18]. The Urban III PCR reported 24 percent increases for kampung sites along roads.

[19]. That is, 23.3 percent annual increases in nominal terms during a period in which inflation averaged 7.2 percent annually. Struyk's survey included high-income housing whose value may have appreciated more rapidly than that of kampung housing.

Table 4.1: Project estimates of Kampung land values (thousands of rupiahs per square meter in 1993 prices)

	Along Roads	Along Footpaths	Inner Kampungs
Jakarta			
SAR estimates			
Urban I, 1972			
unimproved	22.7	15.0	6.8
improve	48.4	28.4	11.3
increase	113%	90%	67%
Urban II, 1976			
unimproved	44.6	30.2	24.2
improve	65.5	36.0	na
increase	47%	19%	na
Urban III, 1978			
unimproved	47.3	31.7	22.1
improved	71.7	54.4	42.0
increase	52%	71%	90%
PCR estimates			
Urban III, 1988			
unimproved	60.9	36.6	12.9
improved	75.8	47.1	20.7
increase	24%	29%	61%
Surabaya			
SAR estimates			
Urban II, 1976			
unimproved	41.6	29.5	20.8
improved	61.5	36.9	26.2
increase	48%	25%	26%
Urban III, 1978			
unimproved	61.9	49.2	34.8
improved	101.9	66.5	53.2
increase	65%	35%	53%

Note: Current prices are converted into 1993 prices based on the CPI reported in IMF *International Financial Statistics*,
Average exchange rate for 1993: US$1.00 = Rp.2,110
Land values reported here are weighted averages of observations made in various sectors of the cities
Source: Bank and GOI Project SARs and PCRs.

4.20 But in examining the real estate market as a whole in Jakarta and Surabaya, one is struck by how low kampung land prices still were, when compared with prices for modern urban real estate.[20] As already mentioned, prime land can be worth 30 times more than improved kampung land. For residential areas, Dowall and Leaf reported significantly lower prices in their survey of Jakarta in 1989. They found that centrally located residential land, for instance, commanded prices on the order of US$286 per square meter. If these prices increased at a modest annual rate of 9.0 percent between the survey and the present, they would currently stand at US$441 per square meter. Although much lower than commercial land, this price is still 10 times the reported project values of improved kampung land. These price differentials are exacerbated by the limited supply of serviced urban land in Indonesia's cities.[21] Our study did not seek precise measures of the differences. We wished merely to draw attention to the enormous gulf that separates the prices of kampung land, on the one hand, and modern serviced land, on the other, even when both are in similar locations.

4.21 Our survey also inquired into land title of kampung residents. Although 60.7 percent confirmed that they were either the owners or legal occupants of the land they settled - implying the possession of *Hak Milik* of *Hak Guna Bangunan* titles, respectively - many respondents did not fully understand the legal aspects of the claim they were asserting, or even that a certificate was necessary to prove their right. Cross-checks found that other respondents did not always give accurate information about their tenure status. They were perhaps prompted by a desire to convey a secure image of their occupancy to survey enumerators. We decided not to pursue this line of inquiry, since we felt that the information we gathered was not sufficiently reliable.

[20]. Benjamin's study in Bandung confirmed the low value of kampung land in that city. He estimated that sale prices were US$32 6 per square meter in central locations (Benjamin, 1985).

[21]. The chronic shortage of serviced land already in 1983 was a key premise for Devas's review of alternative methods for financing urban land development for low-income housing in Jakarta (Devas, 1983).

Kampungs as Urban Real Estate

4.22 With the scenario painted in this chapter - strong economic growth, the transformation of the real estate sector, and the absence of green field sites - can we reasonably look forward to the redevelopment of most urban kampungs in Indonesia in, say, the next quarter century? Would this be a desirable and meaningful target of the government's second long-term development plan? What would be the consequences for the existing residents of urban kampungs?

4.23 As they become more knowledgeable about the market, residents will increase their awareness of the value of their kampung land as potentially valuable urban real estate. Our study showed that residents of some strategically located kampungs already saw opportunities for significant capital gains in the event of impending redevelopment.

4.24 When Urban I-IV were prepared, this value-added aspect of kampung real estate could be overlooked. Kampung land could effectively be withdrawn from the modern segment of the real estate market, simply by designating it for improvement under KIP. Overall demand for urban land in Indonesia's predominantly poor cities at that time was slack. Today, neither the government nor the Bank can afford to ignore the market forces at work. The renewal of improved kampungs has already taken place, and it is likely to become more common as the demand for urban land increases.

4.25 The government clearly has a role in monitoring this process and in continuing to regulate the private real estate industry, especially in the business of kampung renewal. Ignoring the phenomenon will not make it disappear. In the longer term, kampung land transactions are more likely to take place within the modern segment of the growing real estate markets of Indonesian cities. Kampung residents will see, and sometimes realize, significant gains from the value added to their real estate. The market pressure exerted on some kampungs to be redeveloped will be understood more effectively. Greater knowledge about these market forces can help improve future plans for KIP by taking into account when and how the inevitable transformation of improved kampungs into modern real estate is likely to take place.

Who Benefits and What Should the Government do

4.26 Urban I-IV achieved their intended impacts on land values, but these impacts tell only a small part of the story of kampung improvement and redevelopment. An unanswered question is who should benefit from the significant value added to former kampung land through redevelopment. Erstwhile kampung residents, developers and government can all legitimately claim a share. Market forces determine land price gains, but take a back seat to the bargaining power of these three stakeholders in determining how the gain is shared. On equity grounds, government should recognize the legitimate entitlement of former low-income kampung residents to escape poverty by benefiting from the value added to their land through redevelopment.

4.27 Low-income kampung residents have not always shared in the value added to their land through redevelopment. Settlements for compensation used to be based upon an estimate of the amount necessary to provide a displaced household with a similar plot and house, usually in a more peripheral location. Today, families threatened with eviction are more knowledgeable about the market and file higher but still modest compensation claims. Whether the claims are reasonable or unreasonable is difficult to judge according to normative assessments. These assessments often

incorrectly imply that lower-income families should have a lower entitlement than higher-income households. The final arbiter of the total land value will be the market, but there are clearly roles for local community organizations and NGOs. They can help former kampung residents appropriate some of the value added in Indonesia's rapidly emerging urban real estate markets highlighted by our study.

5. Community Voice in Infrastructure Development, Urban Stability and Security of Tenure

The study's analysis of community participation/consultation in the planning and implementation phases of KIP showed that the involvement of residents varied from one kampung to another. In some kampungs, residents were consulted about the convenience of the location of roads and footpaths, and slightly less about the convenience of the location of water standpipes and sanitary facilities. Consultation in the planning phase of KIP took the form of local meetings in the local officials offices (kelurahan). Similarly, the degree of participation varied. In some kampungs, residents worked through local neighborhood associations to help with simple aspects of KIP implementation, such as the demolition of fences or dwellings. In other kampungs, residents merely observed construction activities. Greater understanding and better guidelines for both community residents and project staff are clearly required.

KIP did not encourage an influx of higher-income groups (that is, "gentrification") into the kampungs, as had originally been feared. In fact, KIP did not disturb the existing residential stability of kampungs, although the social profile of the kampungs has changed under KIP. Residents are better educated and healthier; household sizes have declined; more residents are employed and have greater income; and women have taken a more active role in meeting the economic needs of their families. Improvements in population conditions are not only caused by KIP but also by the opportunities generated by economic growth.

Although KIP did not attempt to influence land and housing tenure directly, the expectation was that it would increase ownership; as community security increased, more people would be motivated to clarify and improve the status of the land they occupied. The study found that KIP did in fact increase ownership throughout the improved kampungs or at least greater security of tenure. In addition, the stronger sense of tenure gave residents an incentive to participate actively in the operations and maintenance, O&M, of community facilities, although O&M levels vary from place to place and it is considered one of the weakest points of KIP.

Community Participation and Consultation

5.1 Local governments are still struggling to install a basic minimum set of infrastructure throughout their areas. They need the cooperation of the community in maintaining existing infrastructure and facilities. But communities must also sense that they are being included in the process of implementation; their inclusion also affects their attitudes toward the types of improvements made in their area.

Main Findings

5.2 Consultation and participation in KIP was widespread (table 5.1). Sixty-eight percent of the respondents in all of the five KIP kampungs stated that they were consulted during the planning of KIP. Seventy-three percent of the respondents said that they participated in the implementation of KIP. The form of participation depended on the city: in Jakarta, 50 percent of KIP implementation participants contributed labor; in Surabaya, 50 percent contributed with money. Residents in Surabaya kampungs also provided consultation and participated in other programs, such as *swadaya masyarakat*. A large number of residents who were consulted also participated: 75 of 85 consulted residents participated in implementation (or 88 percent of those consulted).

Table 5.1: Consultation and participation in KIP kampungs *(percentage of respondents)*

KIP kampung in	*No. of Resp.*	*Consultation*		*Participation*	
		Yes	*No*	*Yes*	*No*
Jakarta	50	66	34	92	8
Surabaya	50	72	25	60	18
Denpasar	25	64	16	60	20
Total	125	68	27	73	14

5.3 To assess whether community participation in KIP affected the attitude of residents about KIP improvements, we analyzed responses to a question about the overall environmental situation in the kampung among those who were consulted about and participated in KIP. Almost 80 percent of the residents who had been consulted and participated also said that the overall environmental conditions of their kampung had improved after KIP. Residents who were not consulted or participated were not as enthusiastic; about half believed that environmental conditions were better, but the other half claimed that they were the same. We can conclude that consultation generally leads to participation, and that participation generally leads to greater satisfaction with KIP outputs.

5.4 In a 1982 survey of kampung leaders in Jakarta, Taylor (1983) found that the more residents who were consulted during the planning phase of KIP, the more the number of residents who improved their dwellings. A cross-tabulation of the extent to which major KIP components were maintained and whether residents were consulted during planning also showed a similar association as in our survey.

The Consultation and Participation Process

5.5 The KIP Unit consulted with various residents as it worked its way down the city's administrative ladder, finally reaching the RW and RT heads.[22] But such consultation rarely sought which kampungs or components should be selected; rather, it was restricted to the practical elements of construction activity. It typically involved determinations about who would be required to give up land or buildings to accommodate road widening or rerouting, and about the location of such facilities as schools or MCKs.

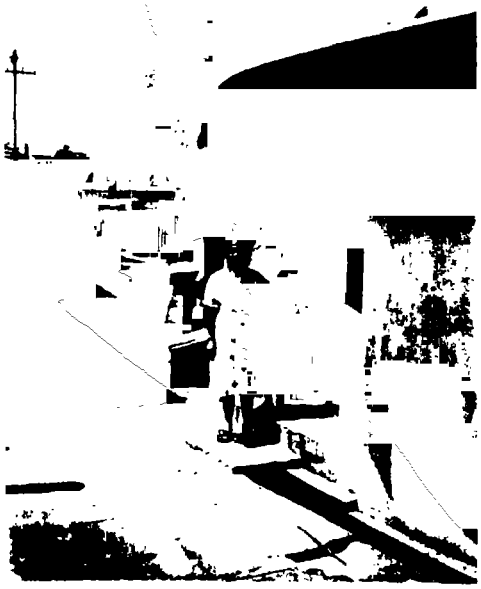
5.6 Community consultation and participation in the early stages of project preparation and design was important for instilling a sense of ownership. The survey question about community participation was frequently misunderstood in Jakarta and Denpasar; many respondents said that they could not remember the process precisely. Many residents in all three cities said that they had been consulted, but when questioned further they stated that they had not actually been consulted about the design, but had been called to a meeting by the neighborhood leader and were told about the project. In Surabaya, residents seemed to have a keen understanding of community participation, and were much clearer about their involvement in the process of consultation. This was also the city that showed the highest level of maintenance by the community.

5.7 Project staff admit that community participation was not one of their priorities at the time, for three main reasons: (1) the absence of funding to pay staff for working in the communities; (2) the absence of time, given pressures (often from the Bank) to stick to programming and to reduce the already significant delays in implementation; and (3) a misunderstanding about what

[22]. RT is the Rukun Tetangga, a community organization comprising between 50 and 100 households. RW is the Rukun Warga, a neighborhood association comprising several RTs (Chapter 6 describes these and other local land entities in greater detail).

community participation actually meant, as well as the methods for enlisting it and the process of incorporating it into project implementation. Although the concept of community consultation and participation is now widely accepted, it still means different things to different people, and many of the local government staff understand the concept but do not understand how it translates into practice. Greater understanding and better guidelines for both community residents and project staff are clearly required.

Changing Criteria for Community Participation: Cohesiveness Among Residents



Costly repairs were required to support the upper story of this house when the lower walls were demolished to widen the road during KIP. (Box 5.1)

5.8 Kampung life in Indonesia is often characterized by mutual cooperation (*gotong royong*), decisionmaking by consensus, and other community-oriented approaches. As incomes and standards of living increase, community interactiveness tends to break down. In our survey, the attitudes of low- and higher-income residents toward community activities differed. For example, in one higher-income area we surveyed, residents told us how the community spirit had broken down over several years to the point that one rarely meets one's neighbors, and community activities, such as working together to clean the drains or repair the roads, are no longer the rule. This situation was in direct contrast to the lower-income community on the other side of the road, where community activities were still an important part of people's lives. New strategies toward community organization may be necessary if the cohesiveness of communities is to withstand the steady rise in the socio-economic conditions of kampung dwellers.

5.9 The organization of the kampung in which RT and RW leaders are elected by the community and act as community spokesmen is a characteristic of Javanese kampungs in particular. Other islands have different social organizations that may be stronger or weaker. Often, the same organization that works in Java is imposed elsewhere less successfully. Some ethnic groups have a family rather than a community-oriented approach, and maintain their independence from the community. Each city must be reviewed independently for the most appropriate strategy. In Jakarta, the community may comprise many ethnic groups, and the influence of the community leaders may vary from one kampung to the next.

Box 5.1: Partial Loss of Land and Building

We met a woman in Kedung Doro who had moved into the kampung in 1962. Her family had bought some land with a temporary house on it for Rp 600,000. The land had colonial rights and she does not have a certificate. The family built a permanent two story house on the plot.

Before KIP they were visited by community leaders who told them of the project and that part of their house would have to be demolished. They were also informed that there would be no compensation. They asked for help and money for repairs but received no reply. They made the repairs themselves, having lost a 1 by 9 meter part of the house, including an outside supporting wall and most of the bathroom. Repairing the house involved installing steel supporting girders to hold up the second floor. The total cost incurred was Rp 1.6 million, and their house was considerably narrower as a result. While the woman understands that the kampung environment is now much improved, she is still not happy that her family had to bear the cost alone.

5.10 Different facilities are perceived differently by different cultures. Javanese kampung dwellers use the roads and pathways as meeting places and as communal facilities; they attach a high value to the community. Balinese families live behind walls in family compounds; the road is more of an accessway than a meeting place, and it plays a less significant role in their culture. The perception of the community towards the asset and the comparative value they attach to it are determinants of the priorities that communities give to operations and maintenance.

5.11 The operations and maintenance of public facilities (O&M) was one of the weakest points of KIP. This recurrent problem was raised in all PCRs and PARs. The common benefits provided by the government in the form of sanitary facilities and garbage disposal are "public goods." Those who do not purchase or pay for any of the public or collective goods cannot be excluded from sharing in the consumption of the good. If the members of a large group rationally seek to maximize their personal welfare, they will not seek to advance their common, or group, objectives, unless individual members are offered some separate incentive for helping bear the costs or burdens involved in achieving the group objectives. The lack of O&M reflects an underestimation of the value of the public good. Everybody would like to use the public good, but no one is willing to pay for it (operate and maintain it) voluntarily.

Urban Mobility

5.12 Community development was expected to be enhanced by stable kampungs with low turnover rates. A widely held concern in the past was that better living conditions in improved kampungs would attract a large migration into the kampung, and that the people moving in would be from higher socio-economic groups, creating a process of vertical mobility, or "gentrification." Gentrification would then cause the out-migration of the lower-income groups for whom the project was intended.

Main Findings

5.13 The survey findings indicate that KIP has not caused an increase in kampung mobility. On the contrary, there are indications that KIP has contributed to stability in the kampungs. New arrivals into the kampungs were more likely to be from social groups that were similar to the existing population. No major population turnover has occurred in the sites and services areas either, although larger houses change hands more frequently. Population mobility is independent of KIP, and is related more to the location of the kampung and its stage of development. KIP

itself did not cause gentrification ("the immigration of middle-class people into a deteriorating or recently renewed city area", (Merriam-Webster, 1990).

Kampung Stability

5.14 An impressive feature of all the kampungs in the study was their stability over time. The average length of tenure among kampung respondents was 23.6 years in KIP kampungs and 27.7 in non-KIP kampungs (table 5.2). Twenty percent of respondents in both KIP and non-KIP kampungs had lived in their homes for more than 40 years. About another 30 percent of the respondents were younger than 40 years of age, and 25 percent lived in the kampung since birth or since early childhood. The Jakarta comparison kampung, one of the Surabaya KIP kampungs, and a Denpasar KIP, all of which are fringe kampungs with relatively recent histories, show less stability. Even in these kampungs, about half of the respondents had lived there for more than 20 years (56 percent in Jakarta, 56 percent in Surabaya, and 48 percent in Denpasar). Many of the second generation has stayed on in the homes of their parents.

5.15 We examined the distribution of years of residence in each of the kampungs, taking into account the period in which they were improved under the Urban I-IV projects - that is, residents who had moved into the kampung before, during, or after the relevant project in each location was implemented (table 5.2). In each of the KIP kampungs, more than half of the residents were in the kampungs before they were improved under one of the four projects and on an average they have lived there for 30 years. We conclude that KIP did not stimulate inward migration. Furthermore, population mobility is related more to the location of the kampung (that is, whether it offers dynamic urban economic activities) and to the age of the kampung than to whether or not the area had been improved under KIP.

5.16 According to the conclusions of a recent evaluation of KIP kampungs in Surabaya (Silas 1992b), the total new population entering the KIP kampungs in the past decade (after the implementation of KIP), ranged from 16 to 27 percent. Comparing these figures for inward migration with the growth rates of kampungs in Surabaya yielded a population mobility of less than 2 percent, less than the average for the entire city of Surabaya.

5.17 Residents were also asked how they perceived the issue of turnover, the majority indicated that turnover rates had remained about the same in recent years. Kampungs in Indonesian cities accommodate quite intricate and stable communities. Thus, high turnover rates would disrupt formal community organizations and social relationships, destroying the sense of community. KIP's rapid and extensive coverage, in terms of area and number of beneficiaries, may partially account for the low level of household turnover or mobility, at least in Jakarta, where about 70 percent of the total eligible kampung population benefited directly from KIP within a decade. Thus, city residents, observing that KIP was extended to most of the city, did not feel it necessary to move to take advantage of the program. The present experience with KIP suggests that an upgrading program should attempt to achieve one round of complete coverage as rapidly as possible to minimize such potentially undesirable impacts as high household turnover.

Table 5.2: When did people move into the kampungs and how long have they lived there?

Site	*Moved in (percentage)*			*Average number of years for residents who moved in*		
	Pre-project	*During implementation*	*Post-project*	*Pre-project*	*During implementation*	*Post-project*
Jakarta KIP	68	14	18	35	16	6
Jakarta non-KIP *	44	40	16	35	16	6
Surabaya KIP	60	20	20	32	14	4
Surabaya non-KIP *	72	12	16	42	11	4
Denpasar KIP	52	24	24	35	11	4

Notes: "During Implementation" means from project approval to completion.
(*) For the kampungs that did not have a KIP, the time division corresponds to the time when other kampungs in the same city had a KIP.

Characteristics of Newcomers

5.18 The socio-economic status of people in Indonesia has improved since the projects were implemented. Primary data collected in 1994 indicate that the average incomes of long-term residents and those new residents do not differ significantly. Thus, we conclude that KIP has not induced vertical mobility. Our survey indicates that (see table 5.3):

- Average income distributions in KIP and non-KIP kampungs are almost identical in Jakarta and Denpasar. Furthermore, it seems that long-term residents have a slightly higher average income.
- In Surabaya, the situation is reversed. The new arrivals to both KIP and non-KIP kampungs have higher income on average, than do longer-term residents. This difference may be related to the economic growth of the city and to the fact that the newly arrived residents have better jobs, particularly those moving into the fringe kampung areas (one of the sites in our survey).
- The longer-term residents in the sites and services areas earn more on average than do the newly arrived. Average income in Jakarta's sites and services project is higher than in the Denpasar site. Overall, as the economy of the community has developed, many of the original plots were settled by young families working in government jobs. Over the past ten years, their income has increased as their careers progressed. They are now more prosperous than before, and they have more household assets: many own cars or motorbikes, and most have a television. It is important to note however, that these are the same people who moved in originally without a great deal of household assets.

Who is Leaving?

5.19 Although we did not meet people who had moved out of the kampungs, information we gathered in interviews indicated that most houses are sold only when the owner dies. Other people who moved out of the kampung are those who had rented houses for a year or two and had moved on, or else were children of residents who had set up homes elsewhere. We were also told that old people sometimes moved out either to live with children or to return to their villages in the country, because the cost of living was too high for them in their retirement.

Table 5.3: Average monthly income by when residents moved in a kampung ('000 Rp.)

	Pre-Project	During Implementation	Post-Project	Overall Average
Jakarta KIP	610	570	470	580
Jakarta non-KIP	600	560	500	570
Surabaya KIP	450	510	580	500
Surabaya non-KIP	670	450	725	660
Denpasar KIP	630	530	410	560
Jakarta SS	NA	790	650	750
Denpasar SS	NA	700	570	660

Notes
SS: sites and services areas
NA: not applicable

5.20 Taylor's 1982 survey on the short-term impacts of KIP also indicated that rental prices increased sharply after KIP, and that many low-income renters were forced to double up. Our interviews in the Jakarta non-KIP kampung indicated that rents there are very high and that renters are doubling up so that they can afford accommodations. Today's cities have a shortage of low-income rental accommodations, which has not necessarily been exacerbated by KIP, although more research is clearly required before this conclusion can be considered definitive.

5.21 One of the fears in the early days of KIP was that low-income groups would be squeezed out of the kampungs. Anecdotal evidence shows that the elderly have often left for reasons related to the cost of living in the city; that low-income renters find it difficult to find accommodations regardless of KIP; and that young people either move to another area or stay on with their parents because there is no more space in the kampungs to build new homes. The growing need for low-cost housing in the inner city areas is another of the challenges of urban development, but not one that is attributable to KIP.

Community Perception of Security of Tenure

5.22 Land rights is a major issue in urban development projects in Indonesia. Land rights have four official classifications: *Hak Milik* (right of ownership); *hak guna bangunan* (right to build); *hak sewa* (tenant rights); and *hak pakai* (right of use). In addition, there are traditional land rights that may be recognized by the community but not by law, as well as colonial land rights that have remained since the land was handed back. Given this complex framework, it is not surprising that the people themselves are often confused, and that projects such as KIP sometimes avoid entering areas in which the land-rights issues have not been settled.

5.23 Many kampungs were originally squatter settlements on waste ground. Many of these settlements emerged during World War II. The turmoil at the time meant that there was little control over the settlements. By the time of Independence, as the country began to confront some of the challenges facing it, the settlements were already established and accepted. Forty or fifty years later, the houses became permanent. A third generation of the same family is now growing up in the house, and yet many still have no rights to the land and are technically still squatters. Unfortunately, many people are unaware of their legal rights over the land and its potential implications.

5.24 We rechecked several surveys and found that people who said that they owned the land often lacked a certificate of ownership. In some cases, these residents were genuinely ignorant about their legal status, but some may also have been wary about admitting their lack of ownership to the survey team, as compensation for land and housing, differ enormously according to the legal tenure of the land.

5.25 Concerning land ownership rights, box 5.2 gives actual cases from two KIP kampungs – one in Jakarta and one in Surabaya. While neither of these cases links the granting of land certificates directly to the urban development projects, the improvements made by KIP, along with the introduction of electricity and the development of the water supply system, were crucial to establishing the permanence of the kampungs as residential areas. Although the Surabaya kampung does not yet have full ownership rights, the process has been started, and the need for the rights has been established.

Box 5.2: Land Certification Process in Managgarai

Kampung Kebun Pisang, Manggarai

In the 1950s, migrants from Central and East Java found a place to build homes in Jakarta on some newly filled-in swampland near Manggarai station and next to the complex built for railway workers. They grew banana trees and vegetables and had temporary homes on the land. More people came – many of them friends and relatives from their home villages – and settled on the land. The banana trees and vegetables disappeared, and by 1970 the area was filled with ramshackle houses. There were no paved roads, and the area was often flooded.

In 1974 a committee of residents was formed to look into their land rights. They first went to the railway company, thinking that the company owned the land. The railway company sent them to the Department of Public Works, which had been responsible for filling in the land. The Department of Public Works sent them to the National Land Agency. At around this time, the kampung was proposed for KIP, and the project came in and built roads and drains. The people were delighted, since it gave them hopes toward a secure future, and greatly improving their quality of life.
In 1976, shortly after the project was finished, the National Land Agency granted the residents Rights to Use the land. Each resident paid Rp 7,500 for a certificate that gave them the right to build permanent homes on the land. It is not possible to either link or separate the two events with any certainty, but the timing would seem to indicate that each one influenced the other.

5.26 Additional security in the sites and services areas is considered by residents to be a major advantage. Women, in particular, have benefited from the increased stability of owning the houses; most had lived previously in rental accommodations, where it was not feasible to invest in structural changes to house a small business. According to our group interviews with women of the sites and services areas, the main reason that so many had built shops, food stalls (*warungs*), hairdressing salons, or had otherwise started micro-enterprises in their homes, was the additional stability in the kampung.

Changing Profiles in the Kampung

5.27 When the early urban development projects were designed, the inner-city kampungs were often referred to as slums, and kampung was synonymous with poverty. Today, a series of successful development initiatives, combined with economic growth in Indonesia, have helped improve the socioeconomic status and living conditions of the kampung dwellers. The families living in the kampungs today are healthier, better educated, and more prosperous than they were 20 years ago. The needs and aspirations of the people have also progressed. Annex D reviews the extent of some of these changes and the reasons for them.

Role of Women

5.28 Female respondents had varying perceptions about whether KIP had an impact on changing women's role.[23] The comments of women showed clearly that women had not been consulted in the planning phase of the projects as a group. When asked about participation, many women did not know; others thought that their husbands had gone to a meeting.

5.29 Family planning has altered women's lives quite dramatically. Smaller family sizes gives women more time for other activities. Again, the impact of POSYANDU has been very significant (Annex D). Women now receive guidance in family health care and nutrition, and the mother's role in community health and in improved meals cannot be underestimated, although it cannot also be related only to KIP. Many more women now work than ever before; one reason may be the time that is now freed up, but another is the changing attitudes towards working women. Although families are smaller, the extended family system still operates on the principle that older children will care for younger children. The number of women running *warungs* (small food stalls) has mushroomed in recent years, to the extent that some who have run *warungs* for a long time, complain of declining profits.

5.30 The community management role of women is plainly visible in the POSYANDU; the women who volunteer for training are usually mothers of young children themselves. They are trained in specific subjects, and can provide informal advice in addition to participating in the regular clinics. The PKK (official women's group) was active in most of the areas, and in some areas the PKK was organizing nursery schools with mothers' help. In Surabaya, KIP included in its design of access roads and accessible pathways narrow beds for planting trees and plants. The PKKs have actively encouraged women to use these beds to grow both medicinal and environmentally beneficial plants, in addition to ornamentals.

Micro-enterprises

5.31 There is little evidence to tie the growing number of micro-enterpreneurs and small scale traders to KIP; the non-KIP kampungs have either the same number of small industries and traders, (as in Jakarta) or twice as many (as in Surabaya); many of these enterprises are operated from the dwelling.

5.32 Nevertheless, many of the traders and micro-entrepreneurs living and working in the kampungs felt that KIP improvements had enhanced their business opportunities and improved their working environment. There is no quantitative evidence to substantiate their perceptions, mainly because the survey did not differentiate between small industries and enterprises inside and outside the kampung. Location plays an important role: traders need customers. Thus, a kampung located near the periphery of the city from which many commute daily will not contain the same number of traders as would a central kampung or one located in an industrial area to which people commute daily. A kampung located near a large market will be the home of many of the traders from the market, and many small businesses manufacturing goods for sale in the markets will be located there. These facts exist regardless of whether the kampung has been improved or not.

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[23]. Most of the analysis of this section is based on case studies and group interviews.

This small industry offers employment to kampung youth, producing snacks to sell on the street.

This kampung resident is offering Nintendo games to children for a fee.

5.33 Food stalls and small shops had proliferated in each of the cities, primarily because the role of women has changed due to family planning and the fact that their contribution to a family's monetary economy has become more accepted. The rise in the disposable income of kampung dwellers has also had a major impact on the traders and foodsellers. KIP has provided these stall owners with a cleaner and more pleasant environment, thus keeping kampung dwellers in the kampung during their leisure hours and attracting customers in from the outside.

Urban Poverty Today

5.34 Per capita income in 1967 was US$50, making Indonesia one of the poorest countries in the world, poorer than Bangladesh, India, or Nigeria. Since the 1970s, income per capita has grown by 4.5 percent annually. An estimated 60 percent of the population (about 70 million people) lived in absolute poverty then; today, about 27 million people, or 15 percent of the population, live in absolute poverty. Infant mortality has fallen from 225 per 1,000 live births in the early 1960s to an estimated 60 per 1,000 live births in 1992. Figures for primary school and secondary school enrollment and for adult illiteracy show equally dramatic improvements. Life expectancy at birth has increased from age 41 to age 61, a 50 percent increase.

5.35 Based on our own observations and the results of the survey, we conclude that the kampung dwellers of today are not the low-income poverty groups that they were when the projects were designed. This does not mean that there is no longer poverty in urban areas. If poverty has been reduced in traditional urban kampungs, and low income groups have not been squeezed out, then the question must be raised : Who are today's urban poor? And where do they live? Poverty groups can be found in slums, on state land, by the sides of railways or rivers, or in illegal areas, living in poor housing conditions in areas with severe environmental problems.

5.36 The poverty line in urban areas is currently Rp 27,900 per capita (Sarjogyo, 1977). The percentage of the urban population that is poor is now higher than the percentage of poor in rural areas. Despite this, our survey encountered only 6 of 199 households whose income was below the poverty line. These were primarily elderly respondents living alone.

6. Institutions: What Did They Learn and Remember?

Despite their focus on physical improvements in the infrastructure, Urban I-IV did have some landmark impacts on institutional development (ID) in the urban sector of Indonesia. For example, new agencies were created to direct development and investment activities, and the managerial capabilities of existing agencies were strengthened considerably. This impact has been sustained insofar as these agencies remain important players on the urban stage of Indonesia to this day.

But the enormous scale and unitary nature of Indonesia's public sector administration reduces the ID impacts of individual urban projects. Despite the recent demonstration of the limits reached by a centralized model in meeting urban sector needs, the government remains the dominant decisionmaker in urban development to this day. Yet difficulties experienced by both the government and the Bank in supervising multi-city projects from Jakarta hastened efforts to devolve project implementation responsibilities to the local level of administration. Project experience showed that urban development needed to be incorporated firmly within the decentralization agenda adopted by the government in the mid-1980s.

One of the lasting impacts of all four projects was to keep important ID issues - notably cost recovery and decentralization - on the urban sector reform agenda. Our study highlighted, however, that the rich learning experience of the urban projects was neither well-documented nor followed progressively throughout the implementation period. Thus, important steps must be taken to consolidate institutional memory within both the government and the Bank in future projects.

Administrative Organization of Indonesia

6.1 Indonesia is a large unitary state on what would be a continental scale in some other regions of the world. Remarkably, for one of the world's populous nations that encompasses the largest archipelago on the globe[24], Indonesia has a clearly structured hierarchy of public administration that brings the authority of the central government to practically all street corners of every city in the country. The hierarchy consists of the following seven levels: (1) central government ministries in Jakarta; (2) provincial governments in 27 provincial capitals (level I): *propinsi; (3) m*unicipalities (level II): *kabupaten* or *kotamadya; (4) w*ards: *kecematen; (5) d*istricts/villages: *desa/kelurahan; (6) n*eighborhoods: *rukun warga*, or *RW; and (7) c*ommunity or family groups: *rukun tetangga*, or *RT.* Nearly all levels are closely involved in urban development. Central government ministries not only set policy, but also administer many aspects of urban management directly. For instance, the Urban I-IV projects operated mostly through agencies at the national level.

6.2 Local administration at the city level throughout Indonesia consists of 54 *kotamadya* and 247 *kabupaten* (sometimes known in English as regencies). *Kotamadya* are generally in charge of larger cities; *kabupaten* take care of smaller cities and towns, with some exceptions. Broadly

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[24]. Indonesia had an estimated 191 million inhabitants in 1992; the country includes some 14,000 islands, ranging 4,900 km east/west and 2,100 km north/south.

speaking, this level of administration corresponds to municipal government in many other countries. It was within agencies at this level, that the Urban II-IV projects established KIP Units.

6.3 The impacts of the Urban I-IV projects were targeted at physical improvements in housing and infrastructure facilities in low-income areas of Indonesian cities. But from the beginning, all four projects included components that sought to stimulate institutional development (ID) within Indonesia's urban sector. Although some project components sought specifically to provide technical assistance for strengthening managerial capacity in a particular agency, the ID effort conceived by the Urban I-IV project designers was much broader. It encompassed today's concept of ID - one that goes beyond merely strengthening a particular organization, by including project efforts that foster sectoral policy and clarify the "rules of the game" in urban development, as well as describe the rights and obligations of stakeholders.

6.4 In tackling ID as a broad concept, one must note that some important caveats apply to the Urban I-IV projects. No single project - within this series or afterwards - could by itself steer a process of sectoral reform that was as massive as that required by the vast and complex system of urban development in Indonesia. At best, individual projects may awaken latent interests or accelerate actions already underway. Urban I-IV did serve such a catalytic role on several important occasions, enabling changes to be introduced, for which the government felt a strong sense of ownership and commitment.

First Steps: The Creation and Strengthening of Institutional Framework

6.5 The most notable measures to stimulate ID in the urban sector of Indonesia were introduced in Urban I with the creation of a completely new government urban development agency, PERUMNAS, and the introduction of mortgage lending to Indonesia for the first time through the state savings bank, Bank Tabungan Negara (BTN). The first project also established basic rules, procedures, and guidelines for developing and financing low-cost housing. Clearly, these ID impacts were sustained. Despite changes in direction, both agencies now celebrate two decades of active intervention in the public-sector management of Indonesia's urban development. Both benefited from technical assistance by later urban projects financed by the Bank, notably Urban IV and the Indonesia Housing Sector Loan (Loan 2725).

6.6 The ID impacts of Urban II-IV were less dramatic. But these projects did help lay the institutional groundwork for pursuing issues later in the government's continuing policy dialogue. Under Urban II, ID emphasis shifted to improving project planning and implementation capabilities within the government entity responsible for implementing the projects - *Cipta Karya* (the Directorate General for Human Settlements of the Ministry of Public Works). In the sense that it was targeted at supporting the implementation of Urban II itself, this ID measure was limited in scope.

6.7 Because the purpose of Urban III was to extend the KIP initiative to Indonesian cities other than Jakarta and Surabaya, the project's ID effort still had to concentrate on laying the institutional groundwork for implementing the project itself. Much technical assistance in project implementation was targeted at *Cipta Karya*. Under the direction of *Cipta Karya*, the project established KIP Units within local government entities in the new project cities of Ujung Panang, Semarang, and Surakarta. When the KIP Units were disbanded after project implementation was completed, the ID impacts were seemingly short-lived. But former KIP Unit staff were redeployed

within the respective local administrations, ensuring that professional skills enhanced by the project were put to good use elsewhere.

6.8 Confidently approaching the expansion of the KIP program to another six cities—all outside Java—Urban IV took bolder and broader initiatives on the ID front. Less technical assistance was necessary for implementing the project itself, since much experience had already been gained at the central level, especially under the previous projects. The bulk of Urban IV project resources went to a large-scale mapping program for the entire country. Although thoroughly prepared and extensively supervised by the Bank, the impact of this component on ID was undermined when the maps were not disseminated.

6.9 The impact of the specific Urban I-IV measures on ID is tangible, but not far-reaching. Studies sponsored by these projects, such as a planning study for the metropolitan region of Jakarta (Jabotabek), did provide a forum for sectoral debate, although the government did not always act on conclusions of the debate. Many officials regarded early studies, such as this one, special "Bank" projects that were not part of the normal business of government. Based on experience of the projects, it was clear that these measures could help advance the program of reform within the urban sector. But the scale and scope of reform required in a country as large and complex as Indonesia dwarf the role of individual projects in bringing sectoral reform to fruition.

6.10 The ID impacts of Urban I-IV on the centralized administration urban development in Indonesia were strengthened with the creation of new agencies and financial products and the improvement of the managerial capability of existing institutions. Since the completion of the four projects, other central government agencies have taken a more active role in overseeing urban development issues. In 1985, the central government's National Development Planning Board (BAPPENAS) assumed a more prominent role in planning the government's urban sector strategy as lead agency for the newly created TKPP (*Tim Koordinasi*), the Inter-ministerial Coordinating Committee for Urban Development. BAPPENAS is responsible for preparing and supervising the *Repelita* (five-year development plans). At the same time, the Ministry of Finance (MOF) also became increasingly involved in urban affairs, given its responsibility for urban taxation and intergovernmental fiscal relations. For instance, MOF established the parameters of the new property tax supported by the USL (*Pajak Bumi dan Bangunan*), which local administrations collect on its behalf. It also assumed responsibility for enacting reforms in local financing—for example, introducing credit mechanisms.

Groping to Coordinate an Integrated Public Sector Investment Program

6.11 The Urban I-IV projects revealed institutional horizontal complexity. As in nearly all countries, urban management involves many sectors and is an interdisciplinary activity. An important consequence of the Urban I-IV projects for ID was that they started a process in which administrative arrangements were sought for coordinating among different sectoral interests involved in urban development. The early urban projects by themselves did not set up these arrangements on a sound footing. They nevertheless set in motion an ongoing search for adequate cross-sectoral arrangements for urban administration.

6.12 An important landmark in this search, which can be traced back to the early efforts of the Urban I-IV projects, was the launching of the Integrated Urban Infrastructure Development

Program (IUIDP). By coordinating six sectors that were intimately involved in urban development, IUIDP was able, in particular, to integrate project lending efforts by external donors. Later projects, beginning with the East Java/Bali Urban Development Project (Loan 3304), tried to incorporate this approach in their operational framework.

6.13 The experience of the Urban I-IV projects indicated clearly that an IUIDP or similar concept was necessary. Especially replicating such operations, the multi-year commitment of urban development programs and the commitment of local funding for infrastructure development were necessary. The Urban I-IV experience also highlighted the need for interagency coordination. For instance, water connections might be laid into a kampung without adequate consultation by the local water authority, as such, standpipes would sometimes be left dry for much of the day. Informal relationships among sectoral agencies emerged under Urban I and II to address such issues. These relationships were formalized under Urban III-IV through the IUIDP, although the precise obligations and responsibilities of each party were not always understood fully. Efforts to develop greater coordination persist, at three levels - the urban policy coordinating committee of the National Planning Board (BAPPENAS) at the national level, local planning boards, and BAPPEDA at the city level.

Experiencing the Limitations of the Centralized Model

6.14 The Urban I-IV projects were directed by the central government in Jakarta as the primary agent responsible for overseeing urban development. For Urban I and to a lesser extent Urban II, concentrating in the city of Jakarta operational components of the projects was an entry point for the dialogue between Bank missions and the central government. Their contact was essentially informal, made on an "as needed" basis. The urban development management still involves several sectoral ministries. Primary responsibility for and control over urban infrastructure investment in Indonesia have traditionally been in the hands of the central government in Jakarta—*Cipta Karya*, the government agency responsible for preparing and implementing Urban I-IV.

6.15 To implement the Urban I-IV projects, the government found key players at both ends of the hierarchy, although the process was driven from the top. Overall responsibility was in the hands of *Cipta Karya* in Jakarta. At the bottom, officials at the kelurahan level played a major role in selecting parts of kampungs for improvements, while officials of the RWs and RTs helped mobilize community participation. In other words, the government was involved in all phases. Given that this arrangement was the normal way of conducting government business in Indonesia, project implementation effected little change. But when Urban III and IV took urban project investments to many cities throughout the country, the project experience did reveal the limitations of centrally managed implementation from Jakarta.

6.16 The basic project approach, driven from the center, was to establish a special KIP Unit within the local administration in each project city. Although these KIP Units functioned successfully in most cities, earlier evaluations have shown that they were not integrated fully into the local administration. The role of the KIP Units also terminated when project implementation was completed. Although many of the special units were disbanded, however, most of their staff were redeployed to other tasks within the local administrations. Some of the procedures adopted purposefully by the KIP Units for project implementation—particularly cost accounting and auditing—were adopted by other departments in the more dynamic local administrations.

6.17 Project experience showed the limitations of the top-down ID strategy that depended on specific improvements in specific areas of the central government. In spite of their efforts to strengthen local capabilities for managing the delivery of urban infrastructure, none of the Urban I-IV projects openly advocated decentralization as such. By showing how far such actions could go when driven from the center, these projects involuntarily helped place decentralization on Indonesia's urban development agenda, supporting the policy adopted by the government itself. They also established a new direction for the Bank's urban lending in Indonesia from the 1980s onwards, which featured the devolution of project implementation responsibilities to local levels of government.

6.18 The government's decentralization program proceeded within the parameters of a unitary structure of public administration (Indonesia is not a federal state). Within this system, decentralization became a process of transferring powers and responsibilities to the lower tiers of central government ministries and agencies. Since the Urban I-IV projects highlighted several critical tasks necessary for managing urban infrastructure and housing effectively, they focused attention on specific functions - such as project implementation - that had to be devolved to local authorities to ensure coverage countrywide. In this way, subsequent urban projects supported by the Bank became important instruments for implementing the government's decentralization agenda.

6.19 Policy statements by the Minister of Public Works at the Surabaya Impact Evaluation Workshop in October 1994 confirm that decentralization remains a national objective for Indonesia. Given complex institutional environment for decentralization, steps taken by the urban sector in this direction can proceed only at the pace of an emerging national consensus. A single urban project could not be expected to achieve decentralization goals by itself. The valuable ID efforts of the Urban I-IV projects to place decentralization on the agenda remain, even if achieving the agenda's goals themselves is still some way off. In the view of the government, the weak administrative capacity of local governments is a major constraint on accelerating decentralization in Indonesia. In the meantime, central government agencies, such as Cipta Karya itself, have been organized along regional rather than sectoral lines, in order to make them more responsive to local interests.

Enhancing the Clout of Local and Neighborhood Officials

6.20 Elections held in 1983 enhanced the interest of local governments in the projects, as satisfactory project performance allowed local leaders to reap electoral dividends. But the Urban I-IV projects had greater impacts at the neighborhood and community levels within each of the kampungs slated for improvement. In Indonesia, a extensive web of district and city-block jurisdictions brings government right down to the neighborhood and family group level, especially on the island of Java. In city kampungs, the *kelurahan*, or city district, is the most important jurisdiction, administered by a *lurah*, who is appointed by the city mayor.

6.21 *Lurahs* played a key role in deciding which parts of their areas would be improved under the Urban I-IV projects. Insofar as residents cede responsibility to *lurahs* for choosing their area for improvement, the investments made by the projects in those areas enhanced the authority of the *lurahs*. For example, the explicit consent of the local *lurah* was essential for collecting data for our impact study in those areas. *Lurahs* are explicitly assigned a major role in the *Tri Bina* (physical environment/human resources/business development) approach to KIP that is currently being pursued by the Third Jabotabek Urban Development Project (Loan 3246). The arrangement

establishes for 3- to 5-year agreements between *kelurahan* and the respective mayor's office about the infrastructural improvements to made in kampungs over that period.

6.22 Administratively subordinated to the *lurahs* are the *Rukun Warga* (RW), or neighborhood jurisdictions. Each RW is divided into some 3 to 12 *Rukun Tetangga* (RT). *Rukun Tetanggas* are community or family group jurisdictions that generally include 50 to 150 households. Unlike the *lurahs*, RW and RT leaders are elected by the community and normally live in the areas of their jurisdiction. Because they are unpaid and are lower-income, often retired persons, RW and RT leaders in kampungs have to eke out a living from the various charges that they can levy on communities.

6.23 These local leaders use community meetings (*rembug* RW and *rembug* RT) to announce KIP and other government plans—to the affected residents. These meetings are also a forum for mobilizing community action to support the famous Javan concept of community self-help, or *gotong royong*,[25] which was used successfully to implement the projects, but less so to maintaining the facilities provided (see Chapter 5). The community meeting represents the interface of officialdom and community grass roots interests. The extent to which RW and RT leaders represent one or the other varies among kampungs. The benefit of the Urban I-IV project investments at this level was to confer a semi-official status upon the local leaders who had brokered the improvements on behalf of their communities. The experience of these projects, which is confirmed by surveys of the low-income neighborhoods improved under them, is that the existence of these formal mechanisms of contact with the community was a necessary condition for the success of the KIP.

Impact of the Projects on Cost Recovery: Sustaining and Replicating Urban Investments

6.24 Although prepared more than 20 years ago, the design of the early urban projects was noteworthy for addressing an important issue still debated on the urban sector policy agenda today in Indonesia - cost recovery. The basic idea behind each project since Urban I was that costs for upgrading low-income areas should be recovered indirectly from citywide property taxes, and that the costs of the sites and services schemes should be recovered directly from the purchasers of the plots. To recover costs indirectly, all urban projects proposed strengthening what was then Indonesia's property tax, IPEDA.

6.25 The actual results were disappointing; the projects had only a limited impact in this area. Despite the fact that the mobilization of local resources was a priority item on the urban sector agenda for more than two decades, Indonesia still relies little on local taxes to generate revenue for financing the urban infrastructure. At the time Urban I was implemented, city authorities in Jakarta had little incentive to introduce such a complex taxation instrument as the IPEDA when greater revenue could be generated more easily though vehicle licensing. And, under the Urban III-IV projects, the rapid increases in IPEDA receipts that supplemented the initial revenue base in other cities still did not provide local administrations with an adequate source of funds for financing much needed urban infrastructure.

6.26 In 1986, the government abolished the IPEDA tax. It was replaced with a new National Land and Building Tax (PBB). Subsequent Bank-financed urban operations, such as the Indonesia:

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[25]. Gotong royong means "sharing a burden" or "carrying a load collectively."

Urban Sector Loan (Loan 1816), supported the effective implementation of this tax. But results on the ground continue to be disappointing. Most PBB revenue growth has come from the taxation of mining operations through out the country. The share of total PBB revenue from urban property has declined steadily. Today, PBB accounts only for 2 percent of local government revenue in Indonesia. Most local revenue continues to come from central government transfers.

6.27 Important lessons are to be learned from the limited ID impact of the Urban I-IV projects (and subsequent Bank-financed urban operations) on cost recovery. While government agencies have adhered consistently to the principles of cost recovery embodied in successive urban projects, strong underlying reservations have been expressed about how and when effective cost recovery should be achieved. In the words of the Minister of Public Works in addressing the Surabaya Impact Evaluation Workshop in October 1994:

> We all agree that the Urban I-IV programs achieved their physical objectives and that they were instrumental in later development of IUIDP. However, the Bank has been too rigid, in our view, in applying formulae for cost recovery and institutional arrangements from the simple Urban I-IV projects to the complex IUIDP programs. Cost recovery principles should be objectives that guide the project design but should not be allowed to dictate that barriers be placed in the way of economic progress or where basic human needs and poverty alleviation are concerned.

Preserving the Institutional Memory: A Lesson for the Future

6.28 Project PCRs and PARs are important for assessing the performance of individual projects, including Urban I-IV. But more must be done to capture the context of the moments lived by the projects, as well as the spirit in which they were conceived and implemented. The Indonesian urban development program has been one of the richest sectoral experiences in the world. But, conducting this impact evaluation study, we found that the institutional memory of events that occurred long ago is weak. Hard-pressed, central government and local administrations are not keen to stockpile information on operations completed in the past.

6.29 In this context, government efforts to establish a project evaluation unit within BAPPENAS, the state planning board should be encouraged. With the support of an IDF grant, BAPPENAS plans to develop an in-house evaluation capability for assessing project performance in all sectors, as well as to undertake impact evaluation studies periodically. Although much must still be done to make the unit effective, this government initiative will highlight the importance of preserving the institutional memory of learning experiences, and not just in the urban sector. Particularly important is ensuring that baseline data and evaluation systems are in place prior to the initiation of any project.

6.30 A strong sense of ownership of previous and current Bank-financed urban development operations in Indonesia bodes well for preserving the sector's institutional memory. Even before the Bank came on the scene, the government was already committed to an extensive kampung improvement program. More important, the Urban I-IV projects were prepared at the government's initiative. Senior policymakers and key officials were intellectually convinced by project concepts, which, in many cases, they crafted. Moreover, an active policy dialogue was maintained, which helped develop consensus among all parties about the direction of urban projects. Consensus forming is more difficult today with a much wider array of opportunities open to governments and

the Bank. For this reason, it is more important than ever to promote opportunities for dialogue; an illustrative example is the Impact Evaluation Workshop held in Surabaya in October-November 1994.

6.31 A major achievement of the Urban III-IV projects was to put KIP programs squarely on the urban development agenda of the central government and the local administrations throughout Indonesia. Despite the large-scale interventions in Jakarta and Surabaya under Urban I and II and *Repelita I*, many still regarded KIP as an emergency program, one that would be superseded when "normal" urban growth got underway. The fact that KIP programs are still being implemented as this report is being prepared reflects the lasting influence of this series of urban projects.

7. Findings and Recommendations

7.1 Impact evaluations are an important tool for an institution to learn and make adjustments in its policies and projects and they are true gauge of project sustainability. Impact evaluations serve several purposes, they: (i) complete the history of projects by writing the "concluding chapter"; (ii) assess the efficacy of the Bank and Borrowers by following investments through to their ultimate goals, and (iii) are a source of lessons needed to improve future development policies and appraisal methods.

7.2 The main finding of this report is that the Kampung Improvement Program improved the quality of life of Indonesian urban areas at a low cost of investment. The projects had immediate and very positive impacts on the kampungs where the inputs were targeted.

7.3 Based on both primary and secondary data, the evaluation yielded the following specific findings:

- Improvements in the kampungs prompted residents to invest more in home repairs and in the operations and maintenance of community infrastructure.
- The immediate areas surrounding the KIP kampungs and the site and services program areas benefited from the projects, as the physical and economic impacts of KIP and sites and services programs rippled to those neighboring communities.
- On the other hand, at the citywide level, environmental conditions have deteriorated, particularly in areas where rapid population and economic growth has increased the demand for urban infrastructure services (housing, water and sanitation, footpaths, roads, solid waste disposal, and drainage). Thus, KIP kampungs and site and services program areas and their immediate surroundings are islands of environmental improvements
- Community consultation and participation in the early stages of project preparation and design was important for instilling a sense of project ownership by the community.
- KIP did not encourage urban mobility while creating a greater sense of tenure security towards house ownership. KIP's rapid and extensive coverage may partially account for the low level of household turnover or mobility. City residents, observing that KIP was extended to most of the city, did not feel it necessary to move to take advantage of the program.
- The rising demand for scarce urban land in major Indonesian cities is likely to make the redevelopment of kampung land into commercial and up-market residential real estate increasingly common.
- Despite their focus on physical improvements in the infrastructure, Urban I-IV did have some landmark impacts on institutional development in the urban sector of Indonesia, through the creation of new agencies and the strengthening of existing institutions at the central level.

7.4 According to the previous findings, the following recommendations and lessons are proposed:

- *An upgrade program should integrate flood control measures and drainage networks at the citywide scale.* Improved drainage systems helped to reduce flooding. This is a direct positive impact of KIP investments. However, some complaints were voiced about drainage backlogs at

the entrance to the main city drain and backups when drains are not cleaned regularly. Improvements in one area should not have a negative impact on residents in neighboring areas.

- *Some aspects of the infrastructure and environmental conditions can be controlled and managed by communities* —for example, dwelling conditions, road and footpath maintenance, solid waste collection from houses, and the upkeep of local drains. Other aspects, such as the illegal dumping of solid waste, the integration of kampung infrastructure with the city-wide infrastructure and the effects of pollution, are beyond the control of the communities and need to be controlled and managed by local governments with assistance by central national authorities.

- *The design of urban projects in Indonesia should include an assessment of the dynamics of the local real estate market.* Growing demand for modern real estate development in Indonesia's cities can thwart low income infrastructure improvements made by projects in prime locations. Redevelopment of many kampungs may come sooner than later, in which case, future projects need to address up front policy issues of compensation for displaced low income families.

- *Future projects should promote working partnerships with community groups and non-governmental organizations (NGOs) as a way to ensure that they are responsive to O & M requirements in their kampungs.* Consultation and participation of communities and NGOs in the early stages of project preparation and design should be included at the planning stage, since these aspects are important for instilling a sense of project ownership by the community. Although the concept of community consultation and participation is now widely accepted, it still means different things to different people, and many of the local government staff understand the concept but do not understand how it translates into practice. *Therefore, greater understanding and better guidelines for community members, NGOs and project staff should be established.*

- *It is important that the institutional memory and lesson learning capacity developed for urban development projects be maintained so as to provide guidance for future endeavors and to facilitate the sharing of knowledge of these endeavors world-wide.* Important steps must be taken to consolidate institutional memory within both the government and the Bank in future projects. With the support of the Bank, BAPPENAS plans to develop an in-house evaluation capability in all sectors, including impact evaluations. Particularly important is ensuring that baseline data and evaluation systems are in place prior to initiation of any project.

ANNEXES

ANNEX A

Methodology of Study

1. The impact evaluation concentrates on three components of the four urban projects: the kampung improvement program (KIP); the development of sites and services program areas and citywide improvements. Given its importance to Indonesia's urban development, KIP was the primary target of our study. Three cities were selected for the impact evaluation: Jakarta, Surabaya, and Denpasar, the first two located in the island of Java and the third one in the island of Bali.[1] The KIP program was evaluated in the three cities, while the site and service area component was evaluated only in Jakarta and Denpasar. Household information collected in the site and service areas was also used as comparison information, given that the socio-economic status of these areas was more favorable than in the kampungs. The third component, citywide improvements, was an innovation in Urban III and subsequently in Urban IV. This component was evaluated in Denpasar. The impact evaluation commenced in September 1993 with the first mission, and continued into April 1993 with the second mission. Field work was conducted until the third week of May. Data entry and correction was completed in the last week of July. Analysis was an ongoing process until the end of the project.[2]

2. To round up the study, the impact evaluation team (IET) held a workshop in Surabaya from October 31 to November 3, 1994. About 30 high-level officials participated in the workshop many of whom had been active in the design and implementation phases of the four projects. During the workshop, preliminary findings were discussed and refined, and major gaps in information were covered.

Data Collection, Sampling, and Analytical Methodology

Primary Data

3. *Questionnaires completed by local interviewers.* Two questionnaires were designed, one focusing on KIP and the other on site and service. The questionnaires were tested and defined during the mission in April 1990. The interviews took about one hour. Consistency checks and return visits to interviewees yielded high-quality data.

4. *Group interviews.* Extensive group interviews were conducted with different sectors of the population, yielding many of the findings in this study. This form of "rapid urban appraisal" identified issues and important points, and its quantitative primary data confirmed and substantiated the findings. In many cases, groups interviews with local officials were the first approach to the selected site. Discussion were flexible and open, although lists of topics for each target group had been prepared in advance as a broad guideline. Group interviews were organized either by community leaders or by members of the community. When work hours or other reasons made group administration problematic, interviewers called on a specific interest group separately at their home or their work place. Interviews were held from

[1] Additional, secondary cities were also visited during the impact evaluation missions. The other project cities visited included Surakarta, Semarang, Ujung Pandang, Banjamarsin, and Padang.

[2] The qualitative field research in each location was undertaken by a British development consultant, Gillie Brown, and an Indonesian socioeconomist, Dr. Djoko Basuki. Background information on the Jakarta KIP program was provided by Dr. John Taylor, who also played a major role in designing the questionnaire for primary data collection and in selecting kampungs for the study,. Primary data collection was carried out in Jakarta by the Center for Architecture and Urban Studies (CAUS), supervised by Ir. Harry Miarsosno. In Surabaya, background work and site selection was conducted by Dr. Johan Silas. Students from the Faculty of Architecture at the Surabaya Institute of Technology carried out the primary data surveys, Two of the enumerators who had helped with the Surabaya survey also undertook the surveys in Denpasar. Data analysis was undertaken in Jakarta by Gillie Brown, assisted by Ir. Sui Damin.

early morning to late at night, to ensure coverage of all different social groups, some of whom were absent for part of the day. The interviews were kept as informal as possible.

5. Walking through the kampung and talking informally with residents allowed the interviewers to question many more respondents than are represented by the actual number used in the data. Respondents in group interviews included long-time residents, staff of the *kelurahan* office, women of the PKK, women who lived and worked in the kampung, staff and members of the *Kooperasi Wanita* (Women's Cooperative), local traders, and so forth. In Bali, Javanese migrants were included as a group, as were the original Balinese residents. Groups around the site and service areas included early settlers, new arrivals, original inhabitants living outside the area, and settlers who had recently moved into surrounding areas. As part of the impact study of citywide improvements in Denpasar, interviewers held discussions with the then project directors of the different components, and with some of those affected, including scavengers on the solid-waste disposal site, the staff and local inhabitants of the Nusa Dua and Kuta resort areas, and Javanese migrants.

6. *Case studies.* Throughout the group interviews and "walking tours," interviewers selected representative households or individuals for in-depth analyses of their lives. Follow-up interviews were conducted at a later date. For example, a family that suffered serious damage from the widening of a footpath and a family of scavengers living in a landfill were selected for follow-up.

7. *Expert observations.* The last page of each questionnaire contains a series of questions to be completed by the interviewer, providing his or her personal view of the kampung or site and service area.

8. *Key informant interviews.* We interviewed experts who could provide salient perspectives about the projects. They included staff in the different agencies involved in project design and implementation (*Cipta Karya,* PERUMNAS, BAPPENAS, and local governments), officials in other international or bilateral agencies (USAID and ADB), academics, and community leaders. The most useful interviews for enhancing the team's understanding of the important issues during project implementation were those with staff who were responsible for components of the projects during implementation. All staff had moved on to different positions, but the effort of tracking them down in their new positions or in their retirement was always worthwhile.

Secondary Data

9. Secondary data came from reports and maps provided by the following sources: the departments of public works at the national and provincial levels; BAPPEDA Tk II in the study locations; district health offices; World Bank Headquarters in Washington and the Jakarta Resident Mission, Non-Governmental Organizations (NGOs); consultants and individuals; and the *Kelurahan* offices of the sites selected for primary data collection. (Annex E summarizes some of the secondary data collected.)

10. Much of the secondary data provided useful background information for preparing this report. However, one limitation with some of the information we found in existing reports was that it was collected for purposes that differed from those of our impact evaluation, and was not always in the form in which we needed it. Other data also proved to be of limited use; for example, information from the *kelurahan* offices was not helpful because the *kelurahan* boundaries did not conform with the boundaries of the kampungs used in the study, and the type of data varied from one *kelurahan* to the next. Although *kelurahan* is the smallest aggregation of official data, one *kelurahan* usually has a wide range of socioeconomic groups, and the data thus do not necessarily reflect the situation in the kampung. But we were able to use other information extensively to illustrate changes over time, such as the baseline study of Surabaya kampungs carried out by LP3ES, and the 1982 PhD thesis by Dr. John Taylor.

The Workshop

11. One of the most valuable features of the methodology was the workshop held in Surabaya. Thirty high-level experts, government officials, and Bank staff attended the three-day workshop. The Secretary General from the Ministry of Public Works read the keynote speech from the Minister of Public Works. The contributions and comments of the participants during the workshop have suggested formulating the conclusions contained in this report.

Site and Household Selection

12. During the April-May 1994 mission, the IET selected the sites for the study. During that period, the researchers made a field reconnaissance of potential research areas. Nine areas were selected for primary data collection surveys - seven for the KIP component, and two for the site and service area component. Sites could be selected if (1) they contained areas improved through KIP under one of the urban projects; (2) they contained central and more peripheral locations, (3) they contained improved kampungs and unimproved kampungs, or (4) for Jakarta, they were included in an earlier research project. Some basic information about the areas selected is shown in table 1; more detailed information is provided in Annex G. Maps of the three cities showing the locations of the survey areas are shown as Maps 1, 2, and 3.

Table 1: Descriptions of the survey sites

City	*Kampung name*	*Survey code*	*Reason for selection*	*Number of respondents*
Jakarta	Kel. Tanah Tinggi	J1	Inner-city kampung improved by KIP	25
	Kebun Pisang and Kebun Sayur, Kel. Manggarai	J2	Inner-city kampung improved by KIP	25
	Muara Baru Kel. Penjaringan	J3	Comparison kampung not included in KIP	25
	Kel. Malaka Sari	J8	Site and service housing area	12
Surabaya	Kampung Kedung Doro Kel. Sawahan	S4	Inner-city kampung improved by KIP	25
	Jagir Sidomukti Kel. Jagir	S5	Fringe kampung improved by KIP	25
	Blauran Kel. Genteng	S6	Comparison kampung not included in KIP	25
Denpasar	Pekambingan Kel. Dauh Puri	B7	Inner-city kampung improved by KIP	25
	Kel. Tegal Kartha	B9	Site and service housing area	12

13. After the sites were chosen, our field survey teams contacted local authorities to engender their full support for our survey. Our experience was that formal authorization by local ward leaders (*lurahs*) was necessary for proceeding with the survey work.

Comments about survey locations.

14. We selected Jakarta kampungs because they had been part of an earlier research project undertaken by Dr. John Taylor in 1982 and 1993. In Manggarai, the original kelurahan had been divided into two, the boundary of which passes through the survey location. Thus, secondary data collected is not comparable with secondary data from records after the mid-1980s.

15. We selected Penjaringan as the comparison area, since it is one of the few areas left in Jakarta in which a large enough area of non-KIP kampung could be found for fielding our survey. Penjaringan is a fringe kampung where development has been heavy in the past 20 years. It also has some fairly extreme environmental problems - a rugged coast, proximity to the site where rubbish is cleared from the drains that run through Jakarta before the water reaches the sea. Yet it provided useful information on a community whose socioeconomic, organizational, and physical development were comparable.

16. The Tanah Tinggi primary data survey was the first to be carried out. Our intention had been to use the center of the *kelurahan* as the basis for selecting respondents, and we indeed used this method to locate the Tanah Tinggi survey area. After reviewing the *kelurahans* in other locations, we decided to use the center of the kampungs as the basis for selecting respondents. Because the distance between the center of the kelurahan and the center of the kampung in Tanah Tinggi was short, we did not repeat the survey. We should note, however, that a higher percentage of low-income, densely populated houses would have been included had the survey been moved.

17. Genteng was a non-KIP inner-city kampung, and in this respect it differed from the Jakarta non-KIP kampung. The results from both of these kampungs provide a useful range of comparisons and conditions. We selected Pekambingan as an inner-city KIP kampung, but, given rapid development in Denpasar recently, it actually exhibited many of the trends of the fringe kampungs elsewhere.

18. We selected 25 households at random in each of the seven kampungs. We used a geographic method of random selection, with grids overlaid onto maps of the selected survey locations (figure 1). The grids were drawn to the scale of available maps, so that the actual survey area would be 300m x 300m. The X axis of the grid was then lined up parallel to the direction of the primary access route within the kampung. The center of the grid was located at the center of the kampung, or identified survey area. At the beginning of the field research period, 25 squares on the grid had been selected randomly. The same squares were used in each survey site. The house nearest to the center of the selected square was visited. If no suitable respondent was found, the interviewer moved one house to the left. If no suitable respondent was found after three houses the interviewer returned to the house at a different time.

19. In some instances, the selected square did not contain a house-for instance, if the square was located on a sport field, school, or marketplace. In this case, the interviewer located a new respondent by moving three squares along the X or Y axis, depending on the position of the square to be relocated.

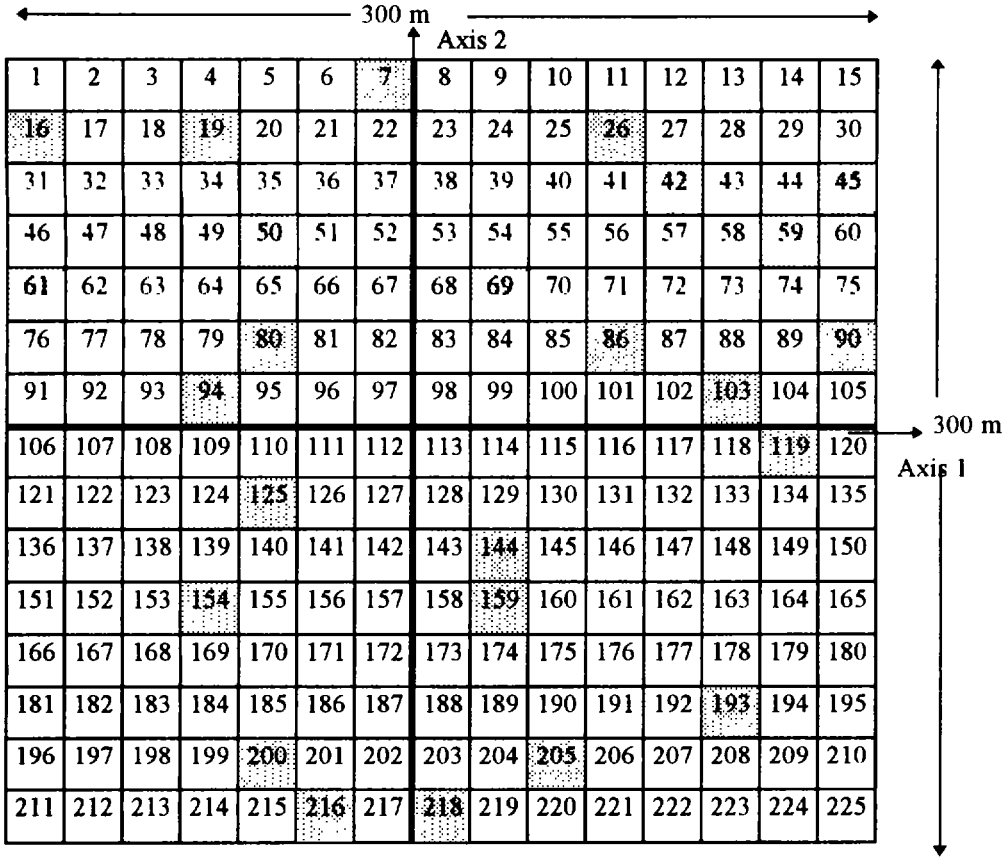
20. In each of the two site and service areas, 12 residents were interviewed. These households were selected in a manner similar to the one used to select kampung households. Both structured interviews and group surveys were fielded.

Analysis

21. To analyze the data, we opted for a methodology that combined rigorous quantitative analysis with qualitative information obtained from secondary data, group interviews, or case studies. The process of quantitative data analysis is shown in figure 2.

22. We used a microcomputer spreadsheet to convert the primary data from the surveys directly into tables. After extensive checks against the original questionnaires and cross-tabulation checks, we produced summary tables (some of which are presented in Annexes E and F). It was apparent early on that some statistical differences existed between KIP and non-KIP sites, and some existed between the cities.

Figure 1: Geographic random selection of households



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100	101	102	103	104	105
106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
136	137	138	139	140	141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160	161	162	163	164	165
166	167	168	169	170	171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190	191	192	193	194	195
196	197	198	199	200	201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220	221	222	223	224	225

Note: The grid is a 300m by 300m, with 20m by 20m cells.

Instructions

Step 1: Draw a map of the kelurahan where the selected kampung is located on a scale of 1:2000.

Step 2: Define the main vehicle street of the *kalurahan* (two-way traffic with sidewalks). This will be the direction of Axis 1.

Step 3: Define the geometric center of the *kalurahan*.

Step 4: Place the attached grid in the following way:

(i) Axis 1 in the direction of the main street identified in step 2

(ii) Locate the intersection of axis 1 and 2 to coincide with the geometric center defined in step 3.

Step 5: Interviews will be conducted within the cells marked on the attached grid.

Step 6: Should a marked cell be located outside the kampung boundaries or within an area of open space or not the kampung, count five cells in the direction of axis 1 or 2 towards the center of the gird, along the rows or columns.

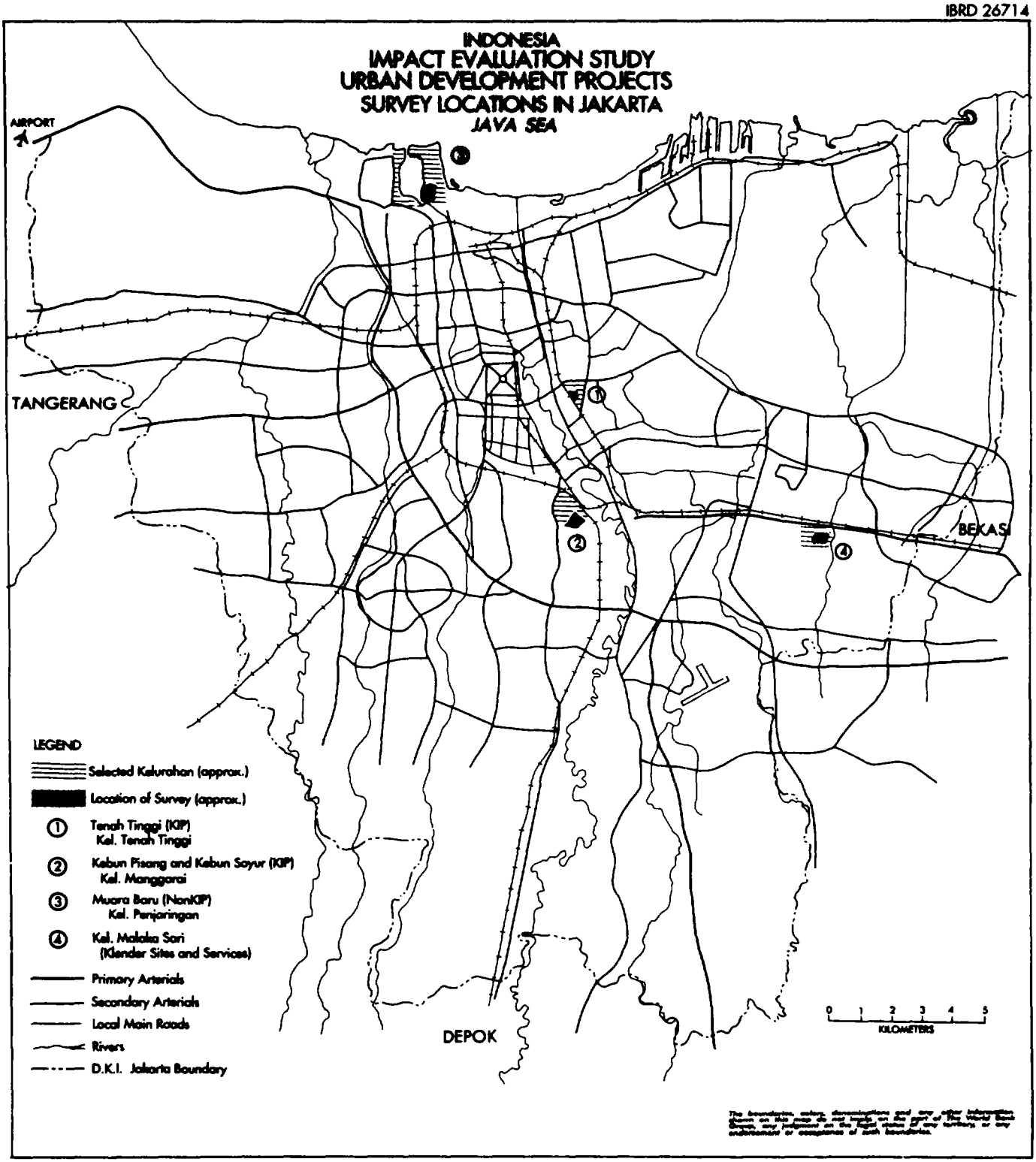
Step 7: If necessary count successively one cell more towards the center, until the cell selected is inside the kampung.

23. We used the SAS statistical analysis package to analyze the data. We tried several probability tests and different methods for grouping the sample into sets. Based on our initial tests we decided to aggregate the data into six sets, and to divide the data into three categories.

24. Mean values, maximums, and minimums were calculated from the empirical (category 1) data. Using SAS, we also grouped category 1 data into ranges and used analysis of variance procedures to apply them to data in the second and third categories. We used T-tests to assess significant differences between the aggregated sets of empirical data and ranges. The T-tests were particularly useful for showing differences between the aggregated sets in the following in: family size, number of persons in the dwelling, lot size, income and expenditures, and educational levels.

Map 1: Map of Jakarta and selected kampungs and sites and services

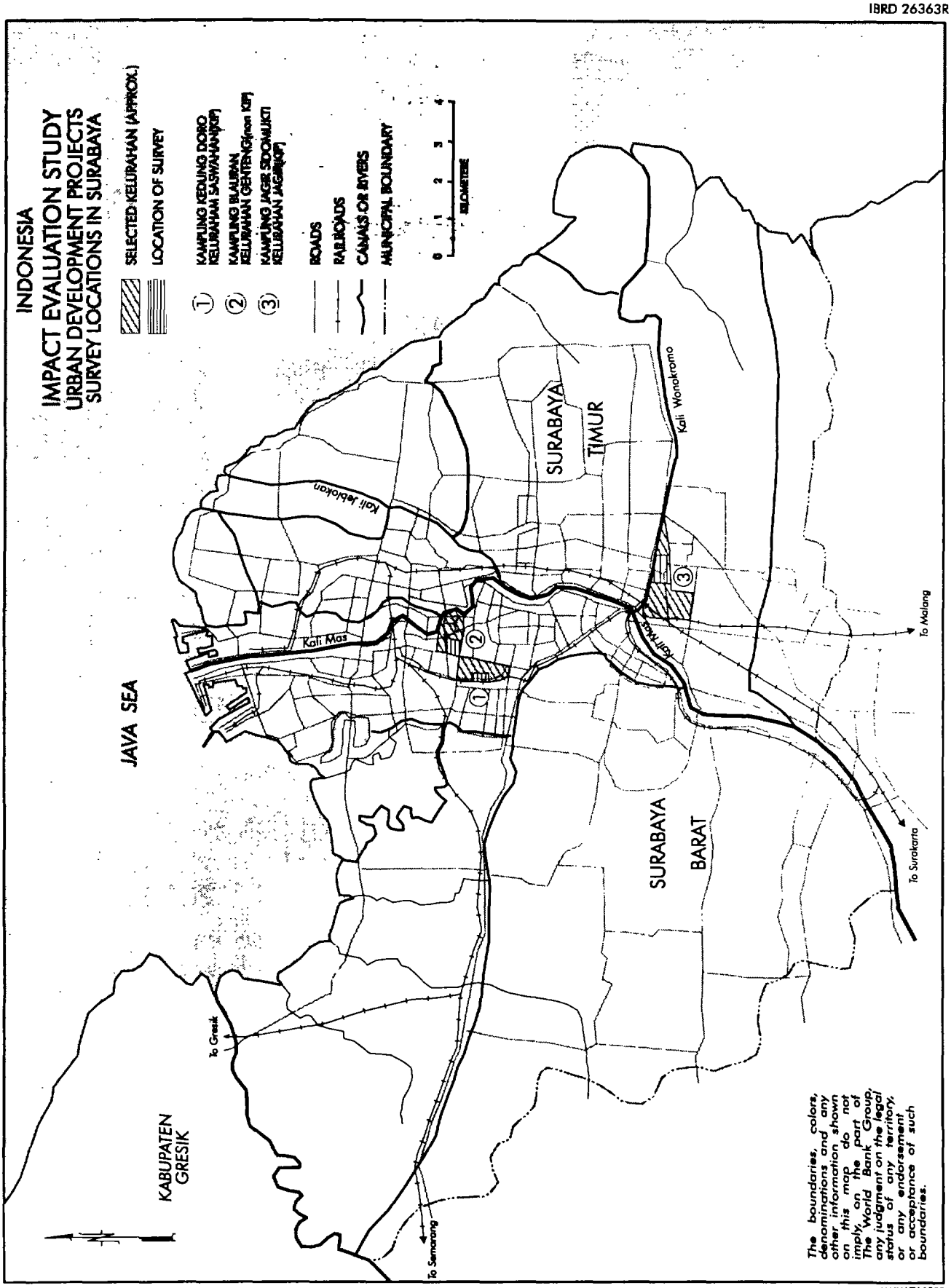
IBRD 26714



JANUARY 1995

Map 2: Map of Surabaya and selected kampungs

IBRD 26363R



Map 3. Map of Denpasar and selected kampungs and sites and services

IBRD 26715

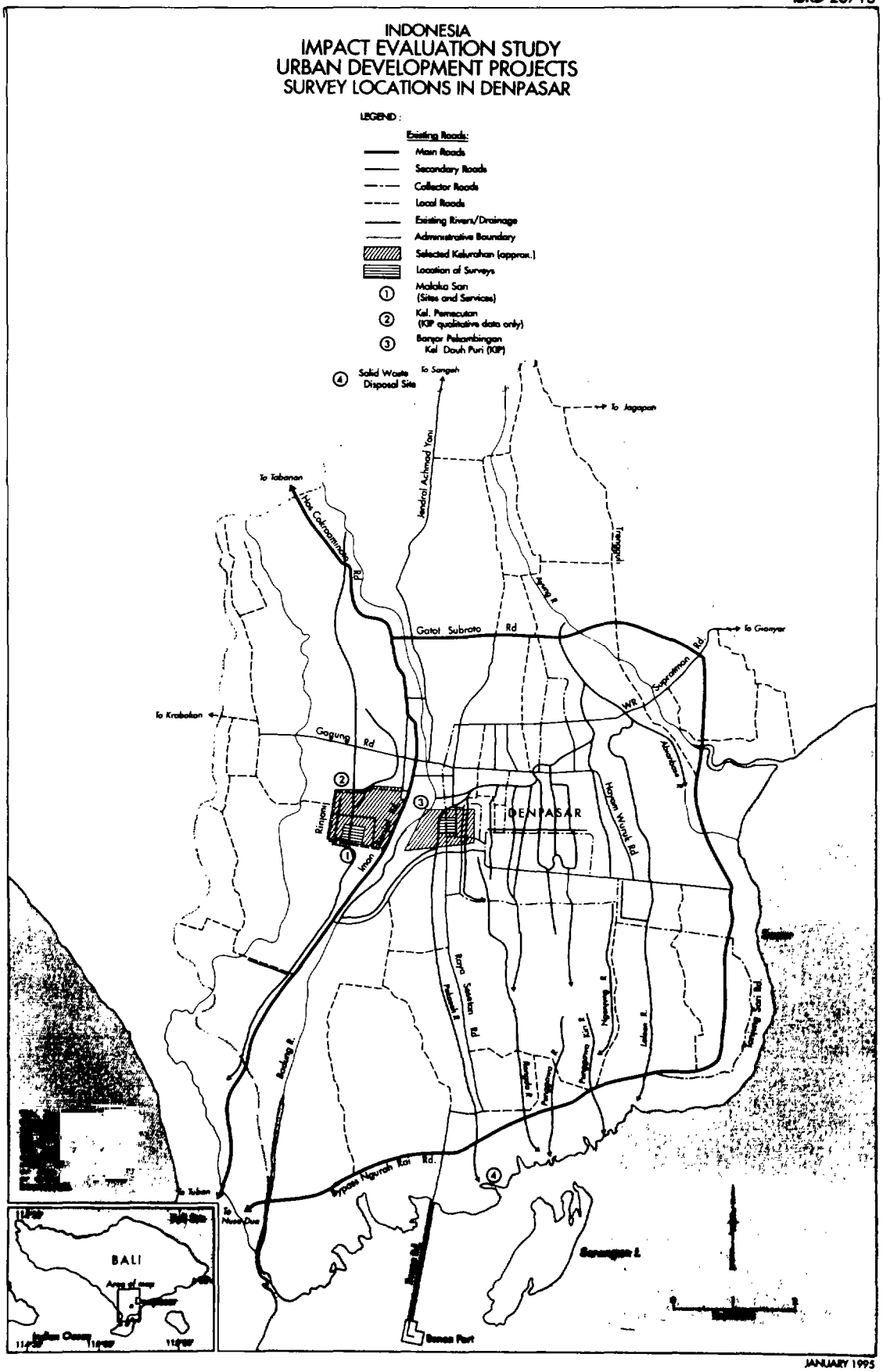
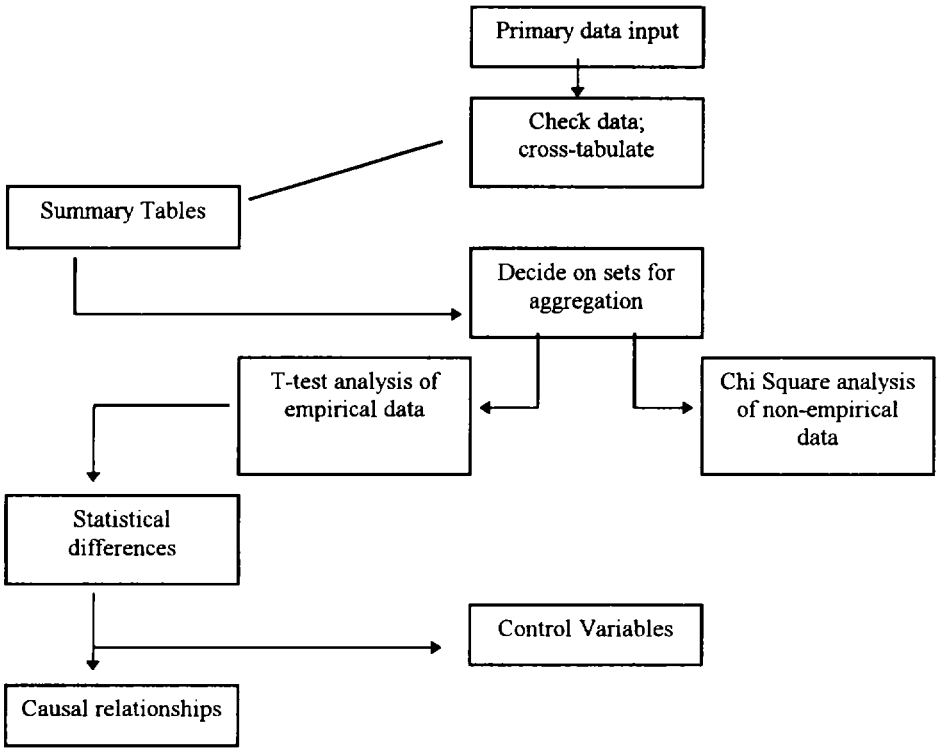


Figure 2: Analysis of quantitative data



25. We used Chi square tests of statistical independence to analyze multiple-choice answers, particularly for assessing differences between the following aggregated sets: dwelling conditions, water supply and sanitation, consultation and participation, means of transport, vehicle ownership, and location.

26. Depending on the initial results of the analysis, we conducted additional tests to control for specific variables. Some of the variables used most often were lot size, income, number of years in residence, and housing tenure status. While useful results were gained from Chi square tests, the results in many cases were not conclusive due to the small number of counts in each subset. Analysis of more than two variables was often not possible for this reason, and causal relationships were difficult to establish with any degree of confidence. The experience helped highlight the conflicting interests that must be considered in survey questionnaire design: on the one hand, the number of choices given in a multiple-choice question should be sufficient to provide a clear picture of the situation; on the other, they should be kept small enough to be able to establish a causal relationship confidently during analysis.

27. Preliminary investigations in project files in Washington, DC, and Jakarta revealed the absence of systematically collected baseline data on the kampungs improved under the four urban projects. Clear records were unavailable on which kampungs had been included in each project, and on what facilities each kampung had been provided with. Information was unavailable on the conditions of the kampungs before they were improved. Thus, we were forced to rely on the memories of a few individuals for our site selection and initial investigations. In addition, we could not simply compare the situation of the KIP kampungs today with the pre-project situation in order to assess impacts. We had to try other methods for a comparative assessment of KIP and non-KIP kampungs, referring to more general baseline data available from previous studies. KIP is dispersed so widely throughout Indonesian cities that very few non-KIP kampungs remain to serve as control areas. In addition, other programs similar to KIP have been implemented, complicating the situation.

What went right? What went wrong?

28. The Indonesia urban IER was a major undertaking, yielding many lessons for similar endeavors in the future. For this reason, we provide a brief summary of the main issues we faced in executing the study, independently of questions about the objectives of the research itself. For future studies, it is worth highlighting here what went well and what went poorly during the exercise, including issues associated with institutional memory, the clarity of impacts, the quality of surveys/maps, the complexity of interviewing survey respondents and of arranging group interviews, the desirability of using local leaders as sources of information, the justification for using non-kampungs as control areas, and the problems associated with the questionnaires used in the survey.

29. A limited *institutional memory* posed a problem. From our limited knowledge of exactly where the KIP was implemented and the absence of records on where funds from each project were allocated (mainly in Jakarta), we had some problems in selecting the kampungs corresponding to the four projects under evaluation. In addition, because many kampungs have been upgraded by other programs, both public and private, the task of identifying what was the result of Bank-financing was even harder. The absence of institutional memory also posed a major challenge as we evaluated the citywide improvement component in Denpasar. Although we had a list of staff involved in the projects, most of them had moved away. Reports and maps were not easily available. It was difficult to determine exactly what had been included under this component. We eventually tracked down two staff members who had been part of the project. The information they provided was extremely useful, but did not compensate fully for the absence of written information.

30. Gathering *health information* was difficult. We intended originally to use secondary data to illustrate health improvements; because data were aggregated up to *kecamatan* (sub district) level, we could not do so. Although annual reports give a comprehensive analysis of health statistics at the citywide level, they bear little relevance to the situation in the individual kampungs in which the survey was located. The collection of data on illnesses is vulnerable to the perceptions of individuals. Researchers have noted that the incidence of recorded illness tends to rise with socioeconomic status (the most relevant results are those of the LP3ES survey in 1982). Low-income families often ignore all but the most serious illnesses, since they cannot afford the consultation and treatment fees.

31. The *quality of primary* data was good. We found no major problems during the survey. Experienced researchers double-checked information to confirm the initial findings. Interviewers reported that the questionnaire was relatively clear, and households were able to answer most questions. Two survey groups worked simultaneously in Surabaya and Jakarta. Differences in the perceptions of the two groups and their understanding of the purpose of the questions were unavoidable. Most of these differences have been identified and notes have been added to the tables where necessary. Additional information in the questionnaires helped concentrate the answers from the two areas. The team that conducted the surveys in Surabaya also conducted them in Denpasar, and then analyzed the data after both surveys were completed.

32. *Respondent selection* in the kampungs posed a difficult choice. But the method of selection provided a reasonable system of sampling respondents at random; many other methods were considered, but the grid overlay was chosen because it created the fewest external influences on respondent selection. We acknowledge that this method also has its drawbacks, particularly when selected houses fell into commercial or other nonresidential areas, thus had to be changed. Usually, several selected locations had to be moved, creating a high density of selection within a neighboring area; when the neighboring area was particularly lower income (Genteng) or higher income (Tanah Tinggi), the results appear to have been influenced by this move.

33. The *quality of* maps varied for the three cities. The Surabaya *kelurahan* offices provided high-quality maps. The maps were on a scale of 1:1000 and showed all houses. The grid overlay method worked

extremely well and interviewers were allocated houses in advance. In Jakarta and Denpasar, the maps were drawn to a much smaller scale, and the scale varied among *kelurahans*. None of the maps showed houses. The interviewers were given a spot on the maps corresponding to the center of the selected cell, and were then responsible for selecting the house themselves.

34. *Respondent selection in the sites and services areas* posed difficulties. While the grid overlay method was considered the best option for the kampungs, it may have been better to use a different method for selecting the site and service areas. In these areas, the size of house lots and the percentages of different-size lots were fixed at the design stage. The results could have reflected this factor more effectively if respondents had been selected according to the proportions of different types of houses. We also acknowledge that the surveys samples were very small in the sites and services areas. But we have two justifications for including these surveys area:

- The study in these areas was originally intended to be based on qualitative data. Case studies and group interviews were conducted to this end. The surveys were included to substantiate the qualitative findings with quantitative information.
- The population is much more homogeneous in the site and service areas than in the kampungs. Certain features are predictable-such as the large number of civil servants. Thus, we felt that even the limited data that could be collected would be sufficiently valuable to justify including the results.

35. *Group interviews* provided a reasonable flexibility. It was often neither possible nor desirable to arrange a formal gathering of members of the target group. By maintaining a flexible approach, we could adapt the concept but gather the same quantity and quality of information. Interviews with operators of small-scale industries was not possible without disturbing their work , thus necessitating that we visit several respondents separately in their workplace. If formal interviews could not be avoided, we used them to lead into more informal discussions. Organizing group interviews was harder in Denpasar, and group interviews sometimes became case studies if the specific group contained an insufficient number of members.

36. Different community organizations and culture. The *banjars* in Bali do not necessarily include all the people within a geographic boundary. The *banjar* is more than just an administrative subdivision. Members of the *banjar* form a knit group to celebrate, grieve, or pray together. The rough *banjar* boundary may contain a couple of RTs including Javanese who have their own leaders and do not consider themselves as belonging to the *banjar*. In addition, local residents who move out of the *banjar* because they have inherited property or are renting a house in a different banjar will retain their links completely with their original *banjar*, and are not expected to become part of the new one. This leads to segmented communities. Local leaders could arrange group interviews only with people within their *banjar*, sometimes excluding certain cases of interest to us. More was achieved by talking separately and informally to persons who fell into the target groups (small enterprise owners, women, long time residents, and so forth).

37. *Local* leaders were an important source of information. They local leaders, who had usually lived in their areas since childhood and were able to describe the changes which had taken place in their areas helped us considerably. Many had been key players or decisionmakers in the KIP or *swadaya masyarakat* projects that had taken place in their communities.

38. In our research, we selected *control or comparison kampungs* that is, compared kampungs that were not part of the KIP with others that were. It has been argued that this comparison is invalid, because the kampungs that were not chosen for the program either were in a better and more favorable condition than KIP kampungs or were not in compliance with the future land-use plans for the cities. The comparison kampungs we chose had not been included under KIP because they were not in areas allocated as

residential areas in the city masterplans. However, the nature of the kampungs and their communities were indeed similar to the KIP kampungs. Each of the nine survey areas had its own character and identity, and we considered these features in drawing conclusions from the results.

39. We encountered six specific problems with the items included in the questionnaire:

- The low-income population in our study did not always have similar perceptions of the technical definitions of illness included in the questionnaire.
- Households had problems with answering questions about the income of other household members.
- Information on loans was difficult to obtain.
- Respondents were not knowledgeable about housing or land prices, even when they were owners.
- Many respondents could not remember the IBRD projects, or the sources of funds for facility improvements. The exceptions, were projects that contained "people participation" components (*swadaya masyarakat*) in which residents themselves had actually made a contribution.
- Some respondents were reluctant to provide answers, which can be attributed to Indonesian culture about giving negative responses, thus, questions that required critical evaluation are probably more favorable on average than they should be.

40. In brief, the impact evaluation plotted a simple linear path through a complex myriad of topics and data. Exploratory studies helped establish the methodologies that were adopted. Key issues relevant to today's urban lending program and policy dialogue were chosen. Around these issues, we designed modules, around which primary and secondary data were collected. We tested selected hypotheses, and we discussed the results of our work with local and international experts at a workshop held in Indonesia.

ANNEX B
Completed and Active Projects
Urban Sector: Indonesia

PROJECT NAME Loan No. Cost IBRD Loan Urban Centers	GOALS/OBJECTIVES	COMPONENTS	IMPLEMENTATION RESULTS
URBAN I (1974) L1040 US$51.0 million US$25.0 million Jakarta	To establish a national urban development program to raise the living conditions of the urban poor by improving their access to better physical infrastructure and housing.	(i) KIP: physical infrastructure improvements to 1980 ha. of kampungs benefitting 890,000 low-income residents; (ii) Sites and Services Program: 130 ha. of new urban land with urban services, subdivided into about 7,930 residential lots for sale primarily to low-income families; and (iii) Technical Assistance: aid the National Urban Development Corporation (PERUMNAS) for management assistance, project execution and preparation.	The implementation of the KIP component went smoothly as planned, but delays and difficulties were experienced with the project's sites and services component not only because of lack of experience by both the Bank and the GOI, but also because of policy differences between the two. The slow pace in resolving this conflict contributed to significant delays in implementing the sites and services components. The issues of cost recovery and sustainability were not addressed properly.
URBAN II (1976) L1336 US$104.8 million US$52.5 million Jakarta and Surabaya.	To initiate the KIP aimed at improving the living conditions of the urban poor outside Jakarta (Surabaya).	(i) KIP-Jakarta: physical infrastructure improvements to 3000 ha. of kampungs, benefitting 1.2 million low-income residents; (ii) *Supratman* Program-Surabaya: physical improvements selected by kampungs residents whom contribute 50% of cost; 375 ha. of kampungs improvements; and (iii) Technical Assistance to Cipta Karya for project preparation and execution; GOI property tax improvement program; and feasibility studies for urban projects.	The project successfully continued the already substantial Jakarta KIP, and extended it to Surabaya. The project developed directly from the Urban I and as such benefited significantly from being a follow-on. The technical assistance component was extended well beyond its original scope, and was, therefore, completed with significant delays. The issue of cost recovery and sustainability still persists.
URBAN III (1978) L1653 US$96 million US$54 million Jakarta, Surabaya Ujung Pandang, Semarang and Surakarta.	To expand the existing KIP in Jakarta and Surabaya and to extend it to four other secondary cities and to broaden the KIP including investments to improve general public health (e.g. solid waste management).	(i) KIP: physical improvements to 750 ha., benefitting 210,000 people in Jakarta and 4 secondary cities; (ii) Solid Waste Management in Jakarta and Surabaya; (iii) Drainage improvement; (iv) Small Business Development; (v) Land Registration assistance; and (vi) Technical assistance in project planning, design, implementation, monitoring and evaluation; solid waste management.	KIP execution was a straightforward business for both the Bank and the GOI. Problems with O&M in the project. Technical assistance efforts to Surabaya were successful. The issue of cost recovery and sustainability still persists.
URBAN IV (1981) L1972 US$85.93 million US$43 million Palenbang, Padang, Banjamarsin, Samarinda, Pontianak and Denpasar.	To implement a nationwide KIP; a sites and services program; and strengthening of the management capabilities of the Bank Tabungan Negara (BTN) and the PERUMNAS.	(i) KIP: physical improvements to 1,900 ha benefitting 500,000 people; (ii) Sites and Services: land acquisition and construction of infrastructure and housing facilities; (iii) Denpasar City-wide improvements; (iv) Urban mapping program for about 100 large and medium-size cities; (v) Studies and technical assistance (planning and implementation of KIP; improve municipal tax collection; training; and developing PERUMNAS and BTN functioning and capabilities).	This project was one of the most intensively supervised urban projects world-wide among those completed so far (213 sfwk). The issue of cost recovery and sustainability still persists.
URBAN V (1984) L2408 US$64.4 million US$39.25 million Surabaya, Semarang, Surakarta, and Ujung Pandang	To improve basic urban services and strengthen municipal administration in the project cities and augment the capacity for local resource mobilization.	(i) KIP: basic infrastructure for improvement of 2,430 ha.; (ii) Solid Waste Improvement Program to benefit 1.1 million people; (iii) Drainage Improvement Program: rehabilitation of primary, secondary and tertiary drainage network; (iv) Municipal Management Improvement Programs (development and implementation of programs and training in each of the cities; and (v) Technical assistance for project implementation units at the city and provincial level and to Cipta Karya.	Despite making a formal commitment to resource mobilization, Urban V still retained much of the physical focus upon urban development of its predecessors.

Housing Sector (1986) L2725 US$1,298.7 million US$270 million	To expand access to housing finance for low and middle income households; to reduce overall subsidies and target the remaining subsidies to the lowest income groups; to reduce the reliance of the housing finance system on government funds and introduce new instruments for resource mobilization; to stimulate the production of more low-cost housing by both public and private developers; to generate employment at low foreign exchange costs; and to strengthen BTN and PERUMNAS.	(i) Credit line to BTN to finance a share of total mortgage lending commitments during the last three years of Repelita IV; and (ii) Technical assistance and computer and other equipment for BTN and PERUMNAS to strengthen their operational performance and management.	The key benefits of the project include (a) the expanded role of private developers in the supply of housing, and diminishing role of the government in the production of housing; (b) improvement in the management of the BTN, and automation for the Ministry to better respond to the supply constraints and demand patterns of the housing sector. Private developers involvement in the production of low-cost housing (largely motivated by the availability of subsidized mortgage loans) may not be sustainable without continued availability of some form of subsidies. Although the project achieved most of its objectives, the large problem of supply of affordable housing to the urban low-income households must still to be addressed. (Based on PCR, January 14, 1994.)
Urban Sector (1987) L2816 US$1,005 million US$270 million	To carry out GOI's FY87/88 and FY88/89 urban infrastructure expenditure programs; to strengthen sector institutions and procedures; to improve local resource mobilization; and to increase the responsibilities of local governments for urban infrastructure planning, financing and implementation.	(i) Two-year time slice of GOI's urban infrastructure expenditure program for FY87/88 and FY88'89, composed of high priority expenditures including investment and rehabilitation as well as O&M expenditures; (ii) Implementation of GOI's Action Plan for sector policy and institutional reform aimed at laying the foundations for a substantial shift in responsibility from Central Government to local governments for planning, implementing, O&M and financing urban services; and (iii) Technical assistance for property tax improvement program; and for training in sector financing reform, improvement of planning and programming, strengthening of water supply subsector management, and development of urban institutions and manpower.	On every front, the activities proposed by the USL aimed at shaking up traditional methods of doing urban business in Indonesia, but because of its large agenda (24 items technical assistance) its results were short of what was expected. There was a shift with this project away from the physical development concerns of earlier projects to a finance policy agenda at a moment of fiscal crisis. The results of the USL also demonstrated that actual improvements in resource mobilization through the implementation of new taxes take time to materialize.
Regional Cities Urban Transport (1987) L2817 US$88.1 million US$51.0 million Bandung, Medan, Semarang, and Surabaya	To implement a program for relieving traffic congestion and promote transport efficiency; to strengthen city government capabilities in the planning, implementation, and maintenance of traffic and transport facilities and services; and to establish a process of coordinating the investment activities of central, provincial and city government agencies in urban transport programs.	(i) Road construction: new 4 km between Bandung and Semarang and widening existing ones in all four cities; (ii) Corridor improvements of roads linking all project cities (selective repaving, drainage and traffic-engineering measures); (iii) Traffic engineering programs for traffic congestion, intersections, signal equipment and city street signing; (iv) Road rehabilitation and maintenance equipment and funds; (v) Training for staff development in transportation planning, traffic engineering , road maintenance, and construction management; and (vi) Technical assistance (*Bina Marga*) for project management, construction supervision and preparation for future projects.	Active
Jabotabek Urban Development (1988) L2932 US$223.9 million US$150.0 million	To provide technical assistance for institutional development and training in urban transport and urban management and include physical works (mainly civil works and some equipment) for an extensive program of road improvement and construction.	(i) Physical components: major upgrading of about 90 km of primary and secondary arterial roads, four major flyover road safety measures, a four year program of traffic management and maintenance, and about 35 km of development roads on the city's eastern and western fringes and the former Kemayoran Airport site; (ii) Institutional and policy development: development of a five-year integrated infrastructure investment program (IUIDP), strengthening of national urban transport policy institutions; (iii) Technical assistance for project implementation, advisory services, future expenditure program preparation and training in traffic engineering.	Active
Second Jabotabek Urban Development (1990) L3219 US$348.6 million US$190 million	To develop and implement a coordinated program of physical investments, technical assistance and policies of urban water supply, waste water disposal, drainage and water resource/quality management.	(i) PDAM Jaya Water System Improvements; (ii) Pejompongan Raw Water Pipeline; (iii) Cisadane Treated Water Transmission Main; (iv) Jakarta Sewerage and Sanitation Project Extension; (v) Priority Drainage and Flood Control: canal dredging and upgrading; and (vi) Water Resource Management study and support for improved institutional arrangements for the region.	Active

Third Jabotabek Urban Development (1991) L3246 US$97 million US$61 million	To introduce a more effective and sustainable approach to provision of basic services in Jabotabek through extensive community participation in recognized low-income urban communities; to strengthen environmental protection and pollution control in the Jakarta region; and to improve maintenance of existing infrastructure networks, and provide a firmer basis for planning future development priorities.	(i) KIP to provide basic infrastructure and community services in low-income kampungs (Jakarta); (ii) Solid waste management: secondary collection, cleaning up and closing dump sites, and technical assistance to improve resource recovery; (iii) Environmental protection and pollution control: institutional strengthening and training in monitoring and enforcement, monitoring equipment, natural resource inventory, pollution reduction strategies, feasibility studies in industrial joint waste treatment; (iv) Technical assistance to update the planning framework for development in the Jakarta region; and (v) Implementation of improved infrastructure operation and maintenance.	Active
East Java - Bali Urban Development (1991) L3304 US$360.5 million US$180.3 million	To improve the quality of urban infrastructure investment and service delivery in East Java and Bali (45 participating local governments).	(i) Infrastructure development, rehabilitation and O&M (five-year urban infrastructure expenditure program: civil works and equipment for water supply, urban roads, kampung improvement, market infrastructure improvement, solid waste management, drainage and sanitation); (ii) Program management: physical implementation of the project, further program and subprogram preparation, and management of program implementation; (iii) Institutional Development (municipal management improvement: revenue administration reform, local government financial accounting and management and reform, environmental assessment (ADMAL) institutional development and IUIDP training; and sector development: co-financing of the UNDP/UNCHS-executed IUIDP implementation support project and preparation of future projects).	Active
Sulawesi - Irian Jaya Urban Development (1991) L3340 US$168.9 million US$100 million Nine cities in Sulawesi and Kabupaten capital cities in Irian Jaya	To provide urban infrastructure in selected cities with emphasis on increased access of households to water supply and sanitation services; to support improved infrastructure programming and financial planning in these cities, specially to support the development of local government capacity to prepare and execute annual O&M programs; and to encourage local government and enterprise revenue generation and improve financial management.	(i) Infrastructure development, rehabilitation and O&M in Sulawesi: civil works and equipment for water supply, urban roads, kampung improvement, market infrastructure improvement, solid waste management, drainage and sanitation; (ii) Water supply system rehabilitation and development in Irian Jaya: civil works and equipment for the rehabilitation and expansion of eight piped water supply systems; and (iii) Technical assistance in project implementation support, institution capacity building, and project preparation	Active
Surabaya Urban Development (1994) L3726 US$617.6 million US$186 million Surabaya	To improve urban service levels and affordability, particularly for the poor; productivity and the effectiveness of investments through better infrastructure planning and management, revenue mobilization, project implementation and O&M; environmental quality by enhancing local government capacity to plan, implement and operate infrastructure in an environmentally sound fashion and also by enhancing community participation.	(i) Urban Transport and Traffic Management with priority for public transport; (ii) Water distribution system improvements and expansion to increase coverage from the current 65% to 90%; (iii) Storm drainage to reduce local flooding and related economic and social losses and expand the affordable supply of serviced land; (iv) Human waste collection and disposal; (v) Solid waste collection and landfill disposal; (vi) KIP: basic settlement facilities and living conditions for 500,000 people; and (vii) Institutional development and capacity-building support.	Active
Semarang-Surakarta Urban Development (1994) L3749 US$299.0 US$174.0 Semarang and Surakarta	To improve the provision of urban infrastructure services and the efficiency of urban investments; to promote stronger, more autonomous, and financially more independent municipal governments; and to contribute towards poverty alleviation, mainly through better access to essential services and an improved urban environment. (Part of IUIDP framework).	(i) Urban roads; (ii) water supply; (iii) drainage; (iv) sanitation and sewerage; (v) solid waste; (vi) KIP and MIIP; (vii) basic housing rehabilation program for low income communities in one pilot area in each city; (viii) conservation of historical districts and buildings; (ix) technical assistance for implementation support and capacity building.	Active
Kalimantan Urban Development (1995)			In process to be appraised

Bali Urban Environment (1997) US$150.0 US$150	Not yet appraised
Jabotabek IV (1998)	Not yet appraised
Housing (1998)	Not yet appraised
Jabotabek Urban Mass Transport (1998) US$200 US$150	Not yet appraised
Water and Sanitation Sector (1997) US$200 US$150	Not yet appraised
Sulawesi II (1996) US$140 US$100	Not yet appraised
Rural Infrastructure (1995) US$150 US$100	Not yet appraised
Second East Java UDP (1996) US$225 US$225	Not yet appraised

ANNEX C

INDONESIA: URBAN SECTOR STRATEGY[3]

Sector Context

1. The dimensions of the urban challenge facing Indonesia are well known. Although, like most other Asian countries, the share of urban population (i.e. level of urbanization) is still not as high as in other parts of the world (e.g. South America), the pace of urban growth is very rapid. At almost 6 percent p.a., it is among the highest in Asia; the 1990 census reported 55 million people living and working in urban areas and this figure is likely to reach 90 million by the end of the decade only five years hence. Population and settlements around major cities, in particular, are growing at explosive double-digit rates. Rural-urban migration is only part of the story as in-situ urbanization of previously rural areas is equally significant, at least in Java.

2. Such rapid pace of urbanization is not only inevitable but also intimately related to the high rates of economic growth and diversification in Indonesia. There is still considerable scope for urban development to support, indeed promote, productivity enhancing economic activities and to improve the people's quality of life. However, this hitherto positive linkage between urbanization and improvements in productivity and welfare is also fraying under pressure now in several parts of the country which poses serious threats to the health and livelihood of the populace, to social stability and to the sustenance of high economic growth rates.

3. The Government has invested significant amounts in urban infrastructure during the last decade but could not keep pace as cities and towns absorbed some 70percent of the total population growth during the 1980's. As a result and compounded by inadequate maintenance, service levels could not improve much. Presently, only about 20 percent of urban households have piped water connections; public sewerage coverage is negligible; solid waste management, drainage and flood control are scant; and transport facilities inadequate.

Objectives

4. The Bank's assistance to Indonesia in the urban sector aims to help the Government enable Indonesia's cities and towns to manage the consequences of growth within and around them in a manner consistent with a fast changing national economy and society. The GBHN Guidelines stress the importance of clean water supply, environmental sanitation, and poverty alleviation. The Second long-term (25 year) Development Plan and Repelita VI (1994-98) also emphasize sustainable urban development through improvement in the quality of the living environment, support for economic growth, reduction in regional imbalances and poverty alleviation.

5. More specifically, there are five interrelated objectives of the World Bank's activities in support of urban development in Indonesia. The first three relate to final outcomes while the latter two are instrumental objectives aiming to ensure the sustainability of the interventions. They may be summarized as follows:

- Poverty alleviation through reduction in the large backlog in the provision of urban infrastructure services, both by expanding access and capacity as well as by improving the efficiency of

[3] Discussion with GOI Delegation (February 3, 1995).

utilization of existing assets through better management, improved maintenance, correction of imbalances, and waste reduction (e.g. unaccounted-for-water).

- Improved Urban Environment which is deteriorating at a quickening pace particularly in larger urban centers, much of it related to water, sanitation and waste disposal. Air pollution is also increasingly serious particularly due to rapidly rising levels of motorization and road congestion.
- Enhanced Urban Productivity, especially aspects related to agglomeration economies which are threatened both by traffic congestion and identification of living areas, requires better integration of economic and social functions of cities in their spatial organization and transport networks within and around them.
- Substantial and Sustained Increase in Financial Resources is necessary both for investment as well as maintenance. Notwithstanding possible increases in central government funding, more efficient spending, and the scope for greater private sector participation, this requires more effective municipal finance policies and mechanisms to mobilize resources and recover costs effectively and equitably.
- Institutional Development particularly at sub-national levels, which is perhaps the biggest challenge because the scale and complexity of the urban effort is so vast that the central government can do little more than set policies and maintain a broad oversight role. More effective decentralization requires further articulation of policies, clearer definition of functional responsibilities and relations between different agencies and tiers of government, greater balance between resources and responsibilities, adequate management systems and procedures, as well as accumulation of requisite skills through training and experience.

Policy Issues

6. While there is a broad congruence of views between the Government of Indonesia and the Bank on urban policies, the experience gained from our association (through lending operations, analytical studies, technical assistance activities and operational dialogue) suggests five policy areas which are critical for efficiently addressing the challenges of urban development in Indonesia. Indeed, GOI has put forward initiatives in each of these areas, most recently in the context of updating and confirming the Urban Policy Statement for Repelita VI. However, further work remains to be done in terms of both elaboration and implementation. The critical areas are as follows:

- Institutional Development and Program Structure for urban expenditure programming which should differentiate between large metropolitan areas, cities and smaller towns and recognize more explicitly the regional context as well as economic functions of the urban areas.
- Central-Local Financial Relationships need greater rationalization, predictability and transparency. Clear guidance for local governments to determine the size and funding (including grants, loans and own funds) of their expenditure programs requires articulation of sectoral policies, programs and criteria based on sound economic and technical principles.
- Improved Procedures for Budgeting capital, maintenance and other recurrent expenditures are needed as the present fragmentation in the system leads to poor choices, costly delays and excessive overheads. These coupled with greater efforts on cost recovery through efficient pricing and revenue mobilization (e.g. property taxes) are critical to economic sustainability.
- The Policy Framework and Guidelines for Private Sector Participation in the provision of various urban services needs further elaboration in order to reduce costly delays due to seemingly endless negotiations and more importantly to avoid questionable deals contrary to the interest of the public at large. Given the magnitude of the investment needs and the obvious limitations on public resources (both financial and managerial), creating opportunities for private provision should be much less problematic than experienced to date.
- Land Management and Spatial Planning considerations need considerably greater emphasis in urban development programs as they have a critical bearing not only for economically efficient

spatial organization of urban areas but also their environmental management and the impact on the livelihood (work places) and living areas of citizens. A key priority for the Government is to build on recent initiatives (e.g. 1992 Spatial Management Law) to provide practical guidance to provincial and local governments.

Bank Portfolio and Implementation Experience

7. The Bank has financed twenty urban and/or water supply projects in Indonesia since 1974 with an aggregate loan amount of US$1915 million affecting more than sixty local governments. Urban lending operations in Indonesia have progressed from demonstration projects in Jakarta through more programmatic investments in selected other large cities, to sector lending within an agreed policy and institutional framework. Water supply projects also initially covered one or a few cities, but later assisted a large number of urban settlements under a single operation.

8. The seven projects presently under implementation fall into two categories. The first comprises a series of three sectoral development projects for Jabotabek (JUDP1-3) focusing on urban transport, water supply and sanitation, and kampung improvement respectively. The second group seeks to assist in operationalizing the Integrated Urban Infrastructure Development Program (IUIDP) approach, a cornerstone of the Government's urban policy enunciated first in 1987 and updated recently. The first two operations were programmatic multi-sector operations covering almost 60 local governments in East Java, Bali, Sulawesi (four provinces) and Irian Jaya (only water supply). The following two projects addressed the needs in a large city (Surabaya) and two medium-sized cities (Semarang and Surakarta) on Java. A fifth operation in Kalimantan covering five cities in four provinces has just been negotiated.

9. Consistent with experience Bank-wide and the inherent nature of urban interventions, the implementation of the portfolio has not been easy and has required deployment of considerable Bank staff and consultant resources especially in the early startup phases of most projects. Nevertheless, the development impact is considered substantial and implementation progress has improved in recent years. In particular, local government performance has been better than many expected.

10. Several reviews of portfolio performance conducted jointly by the Bank and GOI over the last two years have elicited considerable agreement on the critical issues affecting implementation. These include:

- Slow start up and pace of implementation.
- Uneven construction quality of works and facilities built.
- Ineffectiveness, long duration and substantial cost of some technical assistance.
- Unclear legal and regulatory framework for urban management.
- Institutional weaknesses in several local administrations.

11. The more recent and proposed lending operations seek to address these issues up-front through suitable (but definitely not excessive nor clearly bureaucratic) project management arrangements and streamlined procedures in order to ensure adequate quality at entry. Both during preparation and implementation greater emphasis is being placed on improving construction quality, rigorous scrutiny of technical assistance and strengthening the ability of the respective organizational units to effectively carry out their routine operations. Other lessons learned from past experience that are proposed to be incorporated in future operations include the following: more explicit, and easily understood, specifications on performance criteria, construction and operations/maintenance standards, as well as clear and timely articulation of environmental and social aspects which are inherently salient in physical infrastructure projects.

Assistance Strategy

12. The policy agenda above is evolutionary in nature and oriented towards implementation with close linkage to institutional and systemic reform. These features coupled with the public investment needs and the economic, environmental and social significance of the objectives argue for investment lending as the instrument of choice for the Bank's assistance strategy. Depending upon the technical complexity and scale of individual components on the one hand and the number of participating towns/cities, geographic or organizational dispersal and time phasing of investments on the other, a suitable mix of specific investment projects and more programmatic or sectoral operations is envisaged. The past experience with the Urban Sector Loan and the series of IUIDP and Jabotabek projects would support this approach subject to the stipulation that all lending operations are simple in design and more focused in their objectives.

13. A comprehensive lending program is proposed over the next five years combining the Jarkarta focus of the late 1980s with the decentralized (IUIDP) approach of the early 1990s. As alluded to above, the designs of individual lending operations should be differentiated explicitly on the basis of the urban hierarchy, i.e. the suitable approaches will be different for the Jakarta metropolitan region, larger cities and smaller towns respectively. While the risks of the Jabotabek program are considerably high and the Bank must necessarily be a marginal player in financial terms, the potential development impact and leverage possibilities of Bank support are much greater. Hence a lending presence is warranted in addition to policy advice in which the core agencies (BAPPENAS, MOF, EKUIN) are particularly interested.

14. The economic rationale for a greater effort in urban development outside Jakarta, and indeed outside Java, is fairly self-evident not only from the point of view of interregional equity but also to enhance the productivity and competitiveness of Indonesia's economy as well as preserve its natural and cultural environment. The proposed program included areas judged to be of highest priority and will accord greater emphasis than hitherto on the specific regional context (geography and economics in particular) of each operation e.g. rapid industrial development in East Java, tourism and environmental risks in Bali, market towns in Sulawesi, low-lying cities and high degree of primacy in the settlement hierarchy in Kalimantan.

15. In terms of sectoral structure, the Bank's urban portfolio and future operations have been organized into three clusters, namely:

- Decentralized Urban/Municipal Development;
- Water and Sanitation and
- Urban Transport

In the first category, integrated multi-sector operations of manageable size and complexity are envisaged in several provinces (e.g. East Java, Bali) or islands (e.g. Sulawesi, Kalimantan) especially for smaller municipalities to prepare and implement local medium-term development programs based on an improved IUIDP (P3KT) process. A similar approach could in principle be followed for individual medium-sized cities. The other two series of projects would be more sectoral in nature focusing upon reform/restructuring of sectoral policies at the national level, program structures, delivery systems, sector management and expenditure criteria in the water & sanitation and urban transport sectors respectively. Depending on technical and institutional complexity, financial requirements and relevance of the policy agenda, individual projects in each series would cover single urban areas (e.g. Jabotabek) or groups of cities or towns needing similar interventions. A critical determinant of success for such a pragmatic "mix- and - match" approach would be ensuring mutual consistency between the different clusters; thus the institutional mechanisms of the sectoral operation would be consistent with the municipal projects

while the individual sectoral components of the latter would be subject to the policies and selection criteria supported by the urban transport and water and sanitation projects.

16. In view of the institutional weaknesses and thinness of the human resources especially at sub-national levels, Technical Assistance (TA) will remain important in the urban sector. However, consistent with the expressed wishes of the core Government agencies (Ministry of Finance in particular) as well as to enhance greater ownership and to avoid crowding out local initiative, the aggregate volume of TA financed by the Bank will be reduced and several recent innovations made standard operating procedure. TA components of investment loans will focus mainly on implementation supervision, institutional development and technical work directly associated with the immediate project. Increasingly such TA will be lodged in provincial or local governments; in cases of components managed by national government agencies, the standard disbursement share for the Bank will be 80 percent instead of the usual 100 percent. In order to instill greater discipline in prioritizing and managing it, TA financing for strategy studies, policy frameworks and major new project preparation will be channeled through the special purpose TA loans (TAP4I) or funded through the Japanese PHRD or the bank's own IDF grants.

17. A relatively modest amount of Economic and Sector Work (ESW) is planned in the near term for the urban sector and an increasing share of it will be "informal". All ESW activities envisaged are intimately and directly linked to the lending program, or with TA activities. Their objective would be to provide the analytical base of the strategic context for the lending and TA program or to address systemic problems including those encountered in implementation. Only the formal task, Jabotabek Vision is programmed over the next three years. The formal ESW is addressed primarily at senior-most levels of government and will follow a "client-first" approach both in objective-setting and execution, e.g. through workshops in Indonesia building further upon the innovative participatory process used recently for the Pacific Islands study.

18. Specific topics envisaged for informal ESW include private provision of public services (e.g. solid waste management, water supply), local government finances update, urban resettlement, and possibly urban sanitation and sewerage. The objectives of such informal ESW is to provide a vehicle for consensus building, documenting Bank analytical work, exposing it to rigorous scrutiny, and most importantly, for operational dialogue not only with central government but also the decentralized client base.

ANNEX D
Changing Profiles in the Kampung

Income and Employment

1. Indonesia's economic growth is still high today, and inflation has fallen below historic levels (see chapter 1). The country as a whole is more prosperous today than it was when Urban I-IV were being prepared. Current GDP per capita stands at more than twice the level of the 1970s. Poverty has declined remarkably, affecting only 15 percent of the total population in 1991, in contrast to more than 50 percent in the 1970s.

2. Although KIP was not meant to increase the average income of households directly, the government and Bank believed that improvements in kampungs would have this effect. We found that average income is independent of KIP, although more residents of KIP kampungs feel that they are better off financially (36 percent) or the same financially (44 percent) than they were four years ago, when compared with those in non-KIP kampungs (40 percent the same, and 36 percent worse off). We also confirmed that household incomes differ considerably within kampungs - again, independently of KIP. Furthermore, independent of KIP, the sources of income are basically the same in all kampungs, and depend on the location of the kampung (see the next section).

3. A summary of the average monthly incomes of the survey respondents is provided in table 1. One interesting feature is the similarity of the incomes contributed by the heads of household in each of the kampungs; another is the greater amount of income contributed by the head of household in the site and service areas. The incomes contributed by the wives in the kampungs differ significantly; it is the lowest in the Jakarta KIP kampungs.

4. Sources of income vary widely, and are influenced by the location of the kampung; for example, a large percentage of the people living in the non-KIP kampung in the center of Surabaya's commercial area are traders, shop owners, or shop assistants, while a large percentage of people living in the non-KIP kampung in the industrial area of Jakarta are factory workers. In the Denpasar KIP and the Surabaya non-KIP kampungs, the percentage of residents who are micro-entrepreneurs and traders is twice that in other kampungs. The Surabaya fringe kampung has a diverse range of occupations (although the majority are employed in private companies), and the largest number of pensioners. Kampung inhabitants work primarily in the private sector or are self-employed (table 2); the only place where public-sector workers are in the majority is in the Jakarta site and service area.

5. Findings from both the earlier surveys by Taylor (1983) and this study suggest that changes in kampung employment opportunities and local economies are due to exogenous factors that are largely independent of KIP. Although KIP implementation clearly stimulated the development of small contractors and businesses, evidence that the program led directly to job creation or economic development in improved kampungs or elsewhere in the city is insufficient. Other factors, such as the proximity of specific kampungs to major employment and business concentrations, the overall expansion of Jakarta's economy within the past few years, the degree of social cohesion, and the quality of informal/formal leadership, appear to account for any changes in broader economic opportunities. For example, in response to a question about whether KIP had increased employment opportunities, 52 percent of respondents in improved kampungs stated that opportunities had remained the same. On the other hand, KIP did provide a more favorable environment for small industries, particularly by easing access to houses so that raw materials could be brought in and finished goods taken out more easily by *becak* or motorbike.

6. The emphasis on reducing population growth since the early 1970s has had highly successful and well-published results, such as in the *Biro Pusat Statistics* (published annually) and the Bank's Environment and Development report. The growth rate in Indonesia fell to 1.98 during the 1980-90 decade, compared with 2.32 in 1970-80. The National Family Planning Coordinating Board had an important role in reducing population growth since its establishment in 1970. As a result of the program, a high percentage of families are now planned families. The social and economic changes effected by this policy are substantial and far reaching. For example, the reduction in the number of children means that mothers have more time for activities other than child rearing, and are thus able to contribute to the family's economy. Fewer children also implies that children will have greater access to education and health care. As incomes rise in real terms, competition for available food is less fierce, thus potentially improving nutritional status. The prosperity of the population should increase as this generation of children from smaller families grows up healthier, better educated, and better fed.

Table 1: Average monthly income

Site	*Total average household income*	*Income contributed by head of household*	*Income contributed by Spouse*
Jakarta KIP	585,584	378,813	35,646
Jakarta non-KIP	552,000	320,000	98,000
Surabaya KIP	497,625	308,063	86,042
Surabaya non-KIP	713,000	337,000	119,000
Denpasar KIP	579,000	339,000	106,000
Jakarta site and service area	727,083	520,833	37,500
Denpasar site and service area	787,500	602,083	102,083

Table 2: Job distribution (public and private sectors)
(percentage of respondents)

Site	*Public*	*Private*	*Other*	*No. of respondents*
Jakarta KIP	12	62	26	50
Jakarta non-KIP	16	80	4	25
Surabaya KIP	28	43	29	47
Surabaya non-KIP	4	83	13	23
Denpasar KIP	24	72	4	25
Jakarta site and service	67	8	25	12
Denpasar site and service area	0	83	17	12

7. The average number of family members in the kampungs surveyed varied from between 4.5 in the Denpasar site and service area to 5.95 in the Surabaya KIP kampung. Overall, the average family size was 5.4 persons which coincides with the national average (WDR, 1994i).

8. Due to the extended family system, the number of people living in a household is greater than the number in the family. The average number of people in the dwelling varied widely - from 5.2 in the Denpasar site and service area, to 7.6 in the Jakarta non-KIP kampung. Overall, an average of 6.3 persons lived in the dwelling. Many of the additional people were relatives who had come from the rural areas to find work or to further their education.

9. Income disparities between the genders also exist. The incomes of the spouses in Jakarta (an average of Rp 51,700 monthly) were lower than in either Surabaya (average Rp 97,000 monthly) and Denpasar (Rp 104,000 monthly). Equal opportunities in education and in the contributions of women to the family economy are greater in cities outside Jakarta. The average monthly income of women is still far below that of men in all survey areas combined (Rp 78,440, compared with Rp 356,074). Gender discrepancies also exist in the wages paid for similar jobs in factories: Rp 2,500 daily minimum wage among women, compared with Rp 3,000 among men.

Education

10. Indonesia has had a policy of universal access to basic education for many years, but a growing percentage of children are receiving education at higher levels now. An analysis of the educational levels of fathers, mothers, and older children shows that the average father is better educated than the average mother, and that the average older child is better educated than either parent. This is just a extrapolation of the conditions of 30 to 40 years ago, when most of these people were school age (see table 3).

Table 3: Family Members with senior Secondary Education or Greater
(percentage of respondents)

			Older Children		
Site	*Father*	*Mother*	*Boys*	*Girls*	*All*
Jakarta KIP	49	23	71	61	65
Surabaya KIP	57	29	92	89	91
Jakarta Non-KIP	16	8	38	30	33
Surabaya Non-KIP	50	26	88	100	93
Denpasar KIP	52	45	100	100	100
Sites and services	76	30	100	89	95

11. The following other trends were found:

- Secondary education among fathers, mothers, and older children in KIP kampungs in Jakarta was more prevalent than in the non-KIP kampungs.
- Secondary education levels among all three groups differ more between Surabaya and Jakarta that they do between KIP and non-KIP kampungs.
- Secondary education among boys and girls does not differ much; the difference between genders is less significant among the younger generation than among their parents' generation.
- All older boys and girls in the Denpasar survey had received secondary education or higher.

12. Our study showed clearly that educational attainment among residents of the unimproved kampung in Jakarta was much lower than those who lived in improved kampungs. The level of education among household heads in the two types of kampungs differed significantly at the 0.05 percent level. This is consistent with the opinion expressed by the Head of the Housing Department of the Jakarta City Authority (a comment made during the Surabaya Workshop) that a large number of uneducated, unskilled people are being attracted into the city by the employment opportunities available in the expanding industrial sector.

13. The percentage of kampung girls who receive secondary education in Jakarta (52 percent) is much lower than in Surabaya (91 percent), and Denpasar (100 percent). From all of the areas we surveyed, 87 percent of 19- to 26-year-old boys had received secondary education, compared with 80 percent of the girls in the same age range.

Health Care

14. Important developments in health care have taken place in the past 10 to 15 years. Among the more important primary health care improvements has been the introduction of Mother and Child Health Clinics, POSYANDU. The Mother and Child Clinics are run jointly by the community health centers and the official family welfare organization, the PKK. The clinics are run at the neighborhood level and operate about once or twice a month. Among other things, the clinics monitor the growth of children younger than age 5, identifying those whose growth rate is outside the normal range and administering supplementary feeding; they also examine and advise pregnant women, provide guidance to mothers in family health and nutrition; and run a vaccination program. The development of the POSYANDU signaled a major switch in emphasis from curative to preventative medicine in the early to mid-1980s. Community health centers were officially required in each neighborhood towards the end of the 1960s; in practice, few existed until much later. The educational approach to medicine did not really start until the mid-1970s, and it was another ten years before the training of community members in primary health care became institutionalized.

15. The increased number of community health centers and the introduction of POSYANDU came shortly after the CHW component of the urban development projects. The community health centers trained members of the community in such basic health care as family planning, nutrition, vaccinations, and monitoring. The training under the urban development projects was more detailed and focused on fewer people. When the new community health organizations were developed under a set of standardized models, these better trained CHWs had no place in the organizational structure. A few became the cadres for the health centers, and helped in the POSYANDU.

16. Under Bank-funded urban programs, the CHWs were paid for the first two years; thereafter, the community was expected to take over the payments to them. However, at the same time, the health department was fostering the idea of voluntary health workers from within the communities on a much wider scale. The idea of training more people for shorter periods was intended to educate a wider number in basic health principles. Not only did the paid CHWs provide a disincentive to these voluntary workers, but the existence of the voluntary workers also meant that plans for the continued payment of these workers was no longer feasible. At the time when they were trained and were operating, they filled a large gap in health services for lower-income communities; however, subsequent developments in the health department filled the gap adequately. The CHW component was not a forerunner of the POSYANDU, although it may have helped strengthen confidence in the community health worker approach.

17. Beyond the impact of the community health workers, improvements in the infrastructure, particularly the provision of water supply, better drainage, and healthier sanitation facilities, were expected to improve the health status of kampung dwellers. Findings from this evaluation showed that health has improved considerably, but that only a part of this can be attributed only to KIP improvements. The absence of systematically collected baseline data means that the analysis of the impacts of the KIP project on health has been based on qualitative information given by mothers, women's organizations, and health workers. In response to our survey, 62 percent of respondents in the KIP kampungs stated that their children were healthier after KIP.

18. All respondents agreed the health of children, babies, and pregnant women has improved considerably in the past 10 to 15 years (box 1). The main reasons are the increase in mothers' awareness of family health and nutrition, and the introduction of the POSYANDU. Physical improvements, such as

piped water and sanitation, were not seen as direct contributors, although most agreed that KIP had contributed indirectly to the improvements.

19. Records of children who require supplemental feeding are not kept, but it is clear that the number of these children had declined. None of the respondents was aware of any cases in the neighborhood, and often the last case remembered was a year or more ago. Residents who had lived in the kampung since the clinics started remembered that there were always several children who required supplemental feeding in those days. This in itself is a clear indication that child nutrition has improved dramatically. Smaller family size, increased income, and better knowledge of nutrition all contribute to this improvement. Of these, only the increased income could be linked indirectly to KIP, except in areas where community health workers were trained under Urban II and III. None of the study locations had been areas where CHWs had been placed.

20. The results of the survey show consistently that most families in all of the kampungs suffered from flu and coughs last year. The next most frequently reported illness was fever; the third, reported by very few, was diarrhea or skin complaints. Surabaya reported more cases of diarrhea than did Jakarta. Most surprisingly, the kampung with the fewest reported cases of diarrhea was the Jakarta non-KIP kampung which has quite severe environmental problems and is in an area identified as high risk by WHO, which is offering free treatment for diarrhea sufferers in the area. The respondents may have been reluctant to report cases of diarrhea in this kampung, where intestinal infections are monitored closely. In all Jakarta and Surabaya surveys, only one family had reported dysentery, while 4 of the 37 households in the Denpasar surveys had suffered from dysentery. A total of 10 cases of typhus were reported, 6 of these in two kampungs in Surabaya; all of the dengue fever cases, except one in Denpasar, were reported in Jakarta. TBC was also recorded primarily in Jakarta, with one case in Denpasar (table 4).

Table 4: Illnesses reported in the past year
(Percentage of respondent families suffering illnesses last year)

	Diarrhea	*Dysentery*	*Typhus*	*Dengue Fever*	*TBC*
Jakarta KIP	16	0	2	10	4
Jakarta non-KIP	4	0	4	4	12
Surabaya KIP	32	2	4	0	0
Surabaya non-KIP	28	0	16	0	0
Denpasar KIP	8	12	12	4	0
Site and service areas	21	8	8	4	4

Box 1: Improvements in Child Health

Group interviews with women were held in each kampung. Each group interview contained at least one woman who had lost a child. One woman in Penjaringan told of watching her 18-month-old daughter die from diarrhea. "It was so quick," she said, "it only took two days." Another woman in Tanah Tinggi told us how she had lost two of her children in one week from dengue fever. Also in Tanah Tinggi we heard how an epidemic of measles had killed some of the neighborhood children in the 1960s. More than a couple had lost prematurely born babies or had had still-born babies.

Thankfully, the stories are all in the past: only one woman we met had lost a child in the past ten years. Her 12-year-old son had died the previous month from a long-term muscle wasting disease.

21. One reason for the apparently limited impact of improvement programs on health levels is the narrow scope and relatively low standard of the inputs. As with economic outcomes, a program that provides only a modest level of physical infrastructure upgrading may not yield dramatic health improvements. Achieving these improvements probably requires a combination of higher-standard water and sanitation inputs and direct health inputs, such as health clinic modernization, the training of community health cadres, and the development of nutrition programs. Thus, one policy implication is that the improvement of programs should also include social aspects that meet health and related needs directly.

ANNEX E

Summary of Secondary Data

Table 1: Population density and mobility

Code	Kelurahan	Density		Mobility				
	City	per family	per hectare	Married	Births	Deaths	Arrivals	Departures
	Jakarta							
J-1	Tanah Tinggi	4.67	581.17	589	568	239	278	330
J-2	Manggarai	5.50	427.44	554	604	197	746	759
J-3	Penjaringan	4.49	160.57	1297	800	227	1535	762
J-8	Malaka Sari	5.93	253.45	464	492	130	1452	955
	Surabaya							
S-4	Sawahan	5.01	263.21		402	262	412	628
S-5	Genteng	4.35	151.75	161	144	54	103	340
S-6	Jagir	4.42	201.09	385	327	74	415	572
	Bali							
B-7	Dauh Puri	5.42	177.55		100	25	385	505
B-9	Tegal kerta	5.15	303.91		27	12	185	254

Source: Kelurahan Monography, 1993

Table 2: Population (by sex and religion)

Code	Kelurahan	Number of People				Religion			
	City	Families	M	F	Total	Moslem	Christian	Hindu	Buddhist
	Jakarta								
J-1	Tanah Tinggi	7750	19258	16943	36201				
J-2	Manggarai	7400	21227	19478	40705	37386	2526	419	374
J-3	Penjaringan	14131	33203	30293	63496	45717	7620	1270	8889
J-8	Malaka Sari	5906	18109	16926	35035	31882	2102	701	350
	Surabaya								
S-4	Sawahan	4726	11732	11947	23689	15925	6732	38	994
S-5	Genteng	1850	3299	4744	8043	5191	2421	28	403
S-6	Jagir	4608	10257	10123	20380	16320	3230	38	691
	Bali								
B-7	Dauh Puri	1964	5528	5125	10653	4929	1430	4060	234
B-9	Tegal kerta	1356	3643	3347	6990	2922	678	3340	50

Source: Kelurahan Monography, 1993

Table 3: Population (by education levels)

Code	Kelurahan	None	Primary School	Junior Secondary	Senior Secondary	Higher Education
	City					
	Jakarta					
J-1	Tanah Tinggi					
J-2	Manggarai					
J-3	Penjaringan		33309	14473	2520	147
J-8	Malaka Sari	550	8300	6438	7920	4700
	Surabaya					
S-4	Sawahan		5586	5866	6987	1863
S-5	Genteng		2411	1504	925	197
S-6	Jagir		3801	908	5371	1707
	Bali					
B-7	Dauh Puri		4028	1699	1674	533
B-9	Tegal kerta		1567	1886	2515	359

Source: Kelurahan Monography, 1993

Table 4: Population (by income sources)

Code	*Kelurahan*	*Civil Servant*	*Private Company Employee*	*Craftsmen*	*Trader*	*Laborers*	*Pension*	*Other*
	City							
	Jakarta							
J-1	Tanah Tinggi							
J-2	Manggarai	1322	794	60	371	315	809	61
J-3	Penjaringan	581		281	1196	6681	106	1696
J-8	Malaka Sari	6050	3457	350	864	340	1210	5001
	Surabaya							
S-4	Sawahan		5208	1282	2720		1011	164
S-5	Genteng		1831		1790	2366		93
S-6	Jagir	1762	2245	523	2549		1461	3583
	Bali							
B-7	Dauh Puri	290	186	24	300	158	287	1170
B-9	Tegal kerta	712	210	5	60	33	110	216

Source: Kelurahan Monography, 1993

Table 5: Kampung economy

Code	*Kelurahan*	*Facilities*						
		Super Market	*Market*	*Shops*	*Stalls*	*Restaurants*	*Bank Credit*	*Other Banks*
	City							
	Jakarta							
J-1	Tanah Tinggi		1	44	60			1
J-2	Manggarai			10	63	2		
J-3	Penjaringan	1	1	275	350		2	5
J-8	Malaka Sari		1	26	20	1	4	2
	Surabaya							
S-4	Sawahan	1	3	>100	>100	25	7	1
S-5	Genteng	1	2	>100	>100	15	17	
S-6	Jagir	1	2	>100	>100		1	
	Bali							
B-7	Dauh Puri	2	1	>100	133	9	6	2
B-9	Tegal kerta	1		7	40		4	

Source: Kelurahan Monography, 1993

Table 6: Kampung economy *(Rp.)*

Code	*Kelurahan*	*Prices of 9 basic items*								
		Rice	*Sugar*	*Salt*	*Cooking Oil*	*Fuel Oil*	*Soap*	*Flour*	*Dried Fish*	*Batik*
	City									
	Jakarta									
J-1	Tanah Tinggi	250	1250	400	1500	400	1200	850	7500	800
J-2	Manggarai									
J-3	Penjaringan	650	1600	400	1250	400	1250	1000	7000	7500
J-8	Malaka Sari	750	1250	400	1400	400	1200	800	7000	9000
	Surabaya									
S-4	Sawahan	750	1300	400	1250	350	1600	1000	4000	7500
S-5	Genteng	900	1250	350	1250	350	1500	850	2500	9000
S-6	Jagir	700	1250	350	1750	350	1500	1000	3750	5000

Source: Kelurahan Monography, 1993

Table 7: Land use status *(hectares)*

Code	Kelurahan	Status				Land Use			
		State owned	Private owned	Right to use	Other	House garden	Industry	Public Facilities	Other
	City								
	Jakarta								
J-1	Tanah Tinggi	28.20	24.09			52.29		7.50	2.50
J-2	Manggarai	80.95		14.28		61.90		33.33	
J-3	Penjaringan	375.66	19.77			284.43	102	9.00	
J-8	Malaka Sari	131.32	2.77		4.38	111.00		8.30	18.93
	Surabaya								
S-4	Sawahan								
S-5	Genteng								
S-6	Jagir	80.94	1.01		19.22	45.53		35.41	20.24
	Bali								
B-7	Dauh Puri	16.50	42.91		0.59	43.00		15.45	1.55
B-9	Tegal kerta	21.43			1.57	21.43		1.57	

Source: Kelurahan Monography, 1993

Table 8: Sports and entertainment

Code	Kelurahan	Playing fields, courts, etc.	Clubs/ Organization	Playgrounds	Cinema, billiards room, karaoke lounges	Traditional Entertainment
	City					
	Jakarta					
J-1	Tanah Tinggi	Badmington 1	Badmington 1 Table tennis 10	2		1 riok
J-2	Manggarai	Football pitch 1	Football 1			
J-3	Penjaringan	Football pitch 1	Marshall arts Volleyball 2 Table tennis 2 Badmington 2 Basketball 2		Cinema 1	Ketoprak Riok
J-8	Malaka Sari	Football pitch 1 Basketball pitch 3 Badmington 4 Tennis pitch 1	Tennis 1 Basketball 1 Badmington 1 Table tennis 1		Cinema 1	Keroncong 9 Ketoprak 1 Ludruk 1 Jaipong 1
	Surabaya					
S-4	Sawahan		Volleyball 1 Karate 1	3	Cinema 1 Billiard 3 Karaoke 4	Ludruk 1 Riok 1 Keroncong 1
S-5	Genteng				Billiard 2 Karaoke 8 Culture Hall 1	
S-6	Jagir	Volleyball 1	Volleyball 3 Tennis pitch 1 Table tennis 4 Marshall arts 1		Billards 1	Karawitan 1
	Bali					
B-7	Dauh Puri	Football pitch 1	Football 1 Volleyball 1 Tennis 1 Karate 1		Karaoke 1	Kekawain 1
B-9	Tegal kerta	Football pitch 1	Volleyball 1 Karate 2			Balinese Dancong 1 Gong Gepyar 1

ANNEX F

Summary of Primary Data

Table 1. Profile of interviewed households

Kampung Code	Average No. of Family Members	Average No. of Persons Living in the Dwelling	No. Heads of Household interviewed	No. of Spouses Interviewed	No. of Others Interviewed	Average No. of Years in Dwelling
J1	5.3	7.0	18	5	1	30.2
J2	5.6	6.1	10	13	2	27.7
J3	5.9	7.6	6	18	1	23.0
S4	6.0	5.6	12	12	1	25.0
S5	5.9	5.9	11	14	0	19.4
S6	5.5	6.4	12	13	0	32.4
B7	5.2	6.7	14	11	0	21.6
J8	5.5	5.3	4	8	0	14.7
B9	4.5	5.2	9	3	0	8.7

Table 2. Number of households claiming house ownership vs. length of residence

Kampung Code	N	0-9 years	10-19 years	20-29 years	30-3 years	>40 years
J1	18	3	0	3	6	6
J2	23	5	3	2	5	8
J3	22	2	6	8	4	2
S4	17	3	2	4	5	3
S5	21	3	4	12	2	0
S6	20	3	2	3	6	6
B7	20	6	2	7	0	5
J8	12	1	11	0	0	0
B9	12	5	7	0	0	0

Table 3. Number of years at present dwelling and previous place of residence.

Kampung Code	Total N	0-9 years in Residence					10-19 years in Residence					20-29 years in Residence				
		N	Previous Place of Res.				N	Previous Place of Res.				N	Previous Place of Res.			
			1	2	3	4		1	2	3	4		1	2	3	4
J1	24	5	5				0					3	3			
J2	25	7	5	2			3	1	1		1	2	2			
J3	25	5	2	1	1	1	6	5	1			8	5	1	2	
S4	24	7	5	2			2	1	1			4	1	2	1	
S5	25	4	3	1			7	5	2			12	9	2	1	
S6	25	4	2	1		1	3	2	1			3	2		1	
B7	25	8	5			3	5	4			1	7	6		1	
J8	12	1	1				11	11				0				
B9	12	5	4			1	7	6		1		0				

(Table 3 continued)

Kampung Code	Total N	30-39 years in Residence					>40 years in Residence				
		N	Previous Place of Res.				N	Previous Place of Res.			
			1	2	3	4		1	2	3	4
J1	24	8	6	1		1	8	5	1	2	
J2	25	5	4		1		8	6	1	1	
J3	25	4	3		1		2	1		1	
S4	24	6	5		1		5	3	1		1
S5	25	2	2								
S6	25	7	4	2		1	8	6	1	1	
B7	25	0					5	4		1	
J8	12	0									
B9	12	0									

Notes:

Previous Place of Residence:

1. Within Jakarta, Surabaya, Denpasar.
2. Within West Java, East Java, or Kabupaten Bandung.
3. Within Java or Bali.
4. Outside Java or Bali.

Table 4. Physical characteristics of dwelling.

Kampung Code	N	Dwelling Conditions		
		High Quality	Mid-Quality	Low Quality
J1	24	16	5	3
J2	25	15	7	3
J3	25	16	7	2
S4	25	19	1	5
S5	25	25		
S6	25	24		1
B7	25	22	2	1
J8	12	12		
B9	12	12		

Notes:

High Quality = Brick/cement walls, tile or asbestors roof, tile or concrete floor.

Mid-Quality = Zinc roof or, Brick and wood walls.

Low-Quality = Earth floor or wood walls.

Table 5. Walls, floors and roofs conditions

Kampung Code	N	Walls				Floor				Roof		
		Brick/ cement	wood and cement	wood	bamboo	tiles/ terrazo	cement	earth	other	tile	wood	asbestos
J1	24	83%	17%	0%	0%	63%	38%	4%	0%	75%	21%	8%
J2	25	76%	16%	4%	4%	56%	40%	4%	0%	84%	16%	0%
J3	25	76%	16%	8%	0%	40%	60%	0%	0%	72%	12%	16%
S4	25	80%	0%	20%	0%	32%	52%	0%	16%	84%	12%	4%
S5	25	96%	4%	0%	0%	60%	28%	0%	12%	100%	0%	0%
S6	25	92%	4%	0%	4%	60%	16%	0%	24%	100%	0%	0%
B7	25	96%	4%	0%	0%	72%	24%	4%	0%	88%	4%	8%
J8	12	100%	0%	0%	0%	83%	17%	0%	0%	0%	0%	100%
B9	12	100%	0%	0%	0%	75%	25%	0%	0%	25%	0%	75%

Table 6. Other dwelling characteristics.

Kampung Code	N	Age of Dwelling			No House with		Average
		less than 5 years	6 -10 years	more than 10 years	Toilet	Kitchen	No. Rooms Occupied
J1	24	0%	4%	100%	24	24	8.2
J2	25	0%	16%	84%	23	25	6.9
J3	25	0%	12%	88%	20	21	5.7
S4	25	0%	16%	84%	22	21	6.4
S5	25	4%	4%	92%	25	25	8.5
S6	25	0%	4%	96%	24	22	7.7
B7	25	4%	20%	76%	23	22	7.8
J8	12	0%	8%	92%	12	12	6.1
B9	12	0%	33%	67%	12	12	7.4

Table 7: Use, type and location of dwelling. Average lot size.

Kampung Code	No. of Resp	Use of Dwelling		Type of Dwelling			Average Lot Size	Average Building Coef	Location		
		Residence	Residence/ work place	Separate	Shared with another family	Shared by many people			by the road	by a footpath	far from road or footpath
J1	24	15	9	18	7	0	149 9	80 8	37 5%	58 3%	4 2%
J2	25	14	11	18	7	0	125.5	79 7	32 0%	68.0%	0 0%
J3	25	17	8	18	6	1	56 9	92 5	36 0%	64 0%	0 0%
S4	25	19	6	19	6	0	111 2	74 2	8 0%	80 0%	12 0%
S5	25	20	5	19	5	1	127 1	85 6	16.0%	84 0%	0 0%
S6	25	13	12	17	8	0	89 9	95 4	8 0%	84 0%	8 0%
B7	25	13	12	19	6	0	235 6	82 1	28 0%	68 0%	4 0%
J8	12	12	0	12	0	0	101 2	81 3	0 0%	100 0%	0 0%
B9	12	11	1	11	1	0	140 2	87 5	50 0%	50 0%	0 0%

Table 8: Physical constraints of surrounding areas.

Kampung Code	Flooding				Drainage			
	weekly	monthly	yearly	never	no drain	open channel	cement channel	earth channel
J1	20 8%	8 3%	25.0%	45.8%	4 2%	50 0%	45 8%	0 0%
J2	0.0%	0.0%	8 0%	92 0%	8 0%	36 0%	56 0%	0 0%
J3	0.0%	16 0%	68 0%	16 0%	28 0%	52 0%	20 0%	0 0%
S4	16 0%	16 0%	52 0%	16 0%	8 0%	28.0%	64 0%	0 0%
S5	4 0%	0 0%	20 0%	76 0%	0 0%	32.0%	68 0%	0 0%
S6	4.0%	8.0%	40 0%	48 0%	0 0%	32 0%	68 0%	0 0%
B7	8 0%	8.0%	8.0%	76 0%	8 0%	0 0%	76 0%	12 0%
J8	0 0%	0.0%	0 0%	100.0%	0 0%	50 0%	50 0%	0 0%
B9	8.3%	0.0%	8.3%	83.3%	0 0%	0.0%	100 0%	0 0%

Table 9: Improvements to Dwelling: Type, Cost and Responsibility of Improvements, and Type of Planned Improvements

Kampung Code	N	Total Cost of material and labor (Rp 000)	Who was Responsible					
			Resident	Owner	Craftman employed by resident	Craftman employed by owner	Community mutual cooperation	Other
J-1	13	2,037	3	10				
J-2	9	2,336	7	7		1		
J-3	19	4,044	7	5				
S-4	21	556	6	7	5	3	1	
S-5	17	1,816	5	3	8	2		1
S-6	18	2,873	6	3	9	3		
B-7	16	4,255		2	5	11	1	1
J-8	7	6,043	3	4				
B-9	10	5,356		1		9		

(Table 9 continues)

Kampung Code	N	Type improvements in last 4 years						Future planned improvements			
		roof	walls	floor	external improvement	Structural form	other	enlarge	upgrade materials	improve utilities	improve appear	No plans to improve the house
J-1	13	7	1	1	4	3	2	0	4	2	5	5
J-2	9	8	3	2	3	3	1	4	6	4	6	2
J-3	19	6	4	3	3	5	2	4	5	4	5	4
S-4	21	7	9	4	16	3	3	8	5	4	4	9
S-5	17	8	2	3	13	7	3	2	4	2	7	6
S-6	18	15	9	6	16	6	1		1	3	5	
B-7	16	10	7	7	14	6	3	3	3	2	9	16
J-8	7	5	3	5	4	4	2	1		2	1	2
B-9	10	9	8	8	6	6	0	2	4	1	5	2

Table 10. Water sources and supply, cost and quality

Kampung Code	Source of Water for Drinking/Cooking					Source of Water for Bathing/Washing					
	Private clean water supply	Shared clean water supply	Bought water	Well	Other (*)	Private clean water supply	Shared clean water supply	Clean Water from public standpipe	Bought water	Well	Other (*)
J1	18	2	3	4	0	16	1	0	1	8	0
J2	6	1	1	18	0	6	1	1	0	17	1
J3	20	1	8	0	0	20	2	0	3	1	0
S4	13	1	9	1	1	12	0	0	4	12	0
S5	20	0	0	6	1	14	2	0	0	14	0
S6	13	0	8	3	1	10	0	0	0	15	0
B7	10	0	0	15	1	8	0	0	0	17	1
J8	10	0	0	5	0	9	0	0	0	6	0
B9	12	0	0	0	0	12	0	0	0	0	0

(Table 10 continued)

Kampung Code	Freq. of services for water (hrs)	Drinking/ cooking water (/day)	Average Cost per Month (Rp. 000)						Total Avg Cost (Rp 000)	Water Quality		
			PAM		Vendors		Other			Good	Reasonable	Poor
			N	Cost	N	Cost	N	Cost				
J1	19.1	45	19	18.7	5	11 9			16 6	14	10	1
J2	22.9	39 8	7	15.7	0		1	5	4 6	24	1	0
J3	15.2	31.3	20	15.4	9	11 7	1	5	16 7	23	2	0
S4	17.3	54	13	12.6	3	2 3	7	4 4	8 1	15	9	1
S5	22.8	125.8	21	11 6	0		4	1 3	9 9	15	3	7
S6	17.9	25.5	17	8 2	7	10.1	4	14 8	10.7	15	5	4
B7	24	27.1	11	14 5					6.3	16	7	0
J8	22 8	30	11	17 6	0		0		16.2	9	3	0
B9	24	21.7	12	13					13	9	3	0

Note.

(*) Other = River, stream, given by neighbours supply at no cost

Table 11: Sanitation

Kampung Code	N	Toilet Type				Toilet Ownership			Average Distance (m)		Average Toilet	Garbage Facilities				
		W.C.	Pit	River or Canal	Other	Private	Shared with other families	Public	Toilet to Well	Toilet to House	cost (Rp 000/ month)	Private bin	Shared bin	Hole	Burnt	Other
J1	24	25	0	0	0	24	1	0			2 5	92%	4%	4%	0%	0%
J2	25	25	0	0	0	22	3	0	17 1	25 6	9.8	80%	20%	0%	0%	0%
J3	25	20	3	0	1	14	11	0	3 0	28 8	18.1	68%	32%	0%	0%	0%
S4	25	24	0	1	0	16	7	1	10 8	13 9	5 2	36%	64%	0%	0%	0%
S5	25	25	0	0	0	25	0	0	7 1	3 7	1 2	44%	52%	0%	0%	4%
S6	25	23	1	0	1	23	1	0	5.8	11 5	1 8	72%	24%	0%	0%	4%
B7	25	25	0	0	0	23	2	0	8 5	9 3	4 4	68%	8%	4%	8%	12%
J8	12	12	0	0	0	12	0	0	10 3			100%	0%	0%	0%	0%
B9	12	12	0	0	0	12	0	0			22 0	100%	0%	0%	0%	0%

Table 12. Family Transportation: Mode of Transport, Vehicle Ownership

	Primary mode of transport by household head to work								*Type of vehicles owned by household*			*Distance car is parked from*
Kampung Code	*bus*	*private car*	*private motor cycle*	*public motor cycle/ojek*	*train*	*bajaj*	*bicycle*	*other*	*car*	*motor cycle*	*bicycle*	
J-1	10	7	3	1		2		1	6	6	7	0
J-2	14	3	6	2	1		3	4	1	8	6	0
J-3	15	2	6	3		1	2	5	2	6	6	25.5
S-4	4		11				2	5		17	8	0
S-5	3	2	13				2	4	5	17	7	0
S-6	2	2	12			1	2	6	2	18	5	200
B-7		2	12				2	9	5	19	14	0
J-8	10	1	1						1	2	7	0
B-9		5	4			2		2	6	11	9	0

Table 13. House and Land Tenure Status

Kampung Code	N	Land Tenure status						House Tenure Status				
		Right of Ownership	Right to build	Right to use	Rented	Other	No Rights	Owned	Rented	Contracted	Free of rent	Other
J-1	24	12	6		4		2	18	5	1		
J-2	25	11	4	7	2		1	18	2			5
J-3	25	8	7	7	3			22	1	2		
S-4	25	16	2	1	1	5		15	5	1		4
S-5	25		5	4	16			19		4		1
S-6	25	17	6			2		19	2	3		1
B-7	25	8	1		5	9	2	18	2	3		2
J-8	12	6	6					12				
B-9	12		12					12				

(Table 13 continued)

Kampung Code	N	own land and house	rent land and own house	use land own house	no rights own house
J-1	24	12	1	6	-
J-2	25	11		11	-
J-3	25	8		14	-
S-4	25	13		3	-
S-5	25		12	9	-
S-6	25	15		6	-
B-7	25	8	3	1	-
J-8	12	6		6	-
B-9	12			12	-

Note:

The figures given for number owning land are known to be overestimated. Many people are unaware of their status regarding land and said they owned it though admitted they had no land certificate or document to prove it.

Table 14. Number of household consulted during the planning of the improvement program

Kampung Code	Consultation during planning							
	for KIP	for other programs	Roads	walkways	water standpipe	MCKs	garbage bin	other facilities
J-1	20	5	2	4	1	1	4	2
J-2	13	14	3	6	0	0	0	2
J-3	1	12	1	9	1	1	2	3
S-4	21	0	2	4	0	0	4	3
S-5	10	2	6	6	1	1	8	3
S-6	0	10	5	5	4	4	7	7
B-7	15	5	0	4	0	0	4	1

Table 15: Type of consultation

Kampung Code	Consultation Process			
	By government official at home	By neighborhood association head	Attended a local meeting	Other
J-1	2	5	2	6
J-2	0	5	2	8
J-3	2	12	1	3
S-4	0	2	8	0
S-5	0	1	11	3
S-6	1	2	4	1
B-7	1	1	2	5

Table 16: Respondents Participation in, and Contributions to KIP or other Programs

Kampung Code	Number of respondents participating in KIP or other public programs			Type of Contributions made by Respondents								
				KIP			OTHER			KIP/OTHER		
	KIP	OTHER	KIP/OTHER	Labor	Building materials	Money	Labor	Building materials	Money	Labor	Building Materials	Money
J-1	19	4	1	6		3	1	1	3			1
J-2	10	10	2	5			4		1	1		
J-3	1	17	1				16	9	13	1	1	1
S-4	24	1	0	9	1	12	1		1			
S-5	8	7	1	1		3	2		6			1
S-6	0	11	0				6	2	9			
B-7	15	5	0	2			4	2	2			

Table 17: Respondents Opinions on Drawbacks of KIP or other Programs

Kampung Code	DRAWBACKS TO KIP PROGRAM (number of respondents)					DRAWBACKS TO OTHER PUBLIC PROGRAMS (number of respondents)				
	partial loss of land	partial loss of structure	lack of compens	over crowding	lack of security	partial loss of land	partial loss of structure	lack of compens.	over crowding	lack of security
J-1	7	0	1	5	1	0	0	0	0	0
J-2	6	1	1	1	0	2	0	1	2	1
J-3	0	0	0	0	0	3	0	1	1	0
S-4	8	1	2	10	2					
S-5	5	0	0	4	2	1	0	0	1	0
S-6						2	1	0	4	1
B-7	2	1	2	11	4	1	1	1	4	2

Table 18: Comparison of Education Levels of Fathers, Mothers and older children

Kampung Code	Average Age of head household	No. Female Headed households	Head of Household						
			N	No education	Primary Education	Junior High School	Senior High School	Academy or College	University
J-1	48.88	6	24	2	5	5	8	2	2
J-2	51.72	4	25	2	5	10	8		
J-3	47.16	0	25	2	16	3	4		
S-4	54.24	2	25	2	10	1	10		2
S-5	52.28	2	25	1	4	6	11	2	1
S-6	53.04	4	24	2	10	2	6	2	2
B-7	46.84	0	25	2	7	3	9	2	2
J-8	51.83	1	12		3	1	7	1	
B-9	42.17	2	12		1	2	7		2

Kampung Code	Spouse						
	N	No education	Primary Education	Junior High School	Senior High School	Academy or College	University
J-1	18		5	6	7		
J-2	19	4	8	4	3		
J-3	25	4	16	3	2		
S-4	22	2	11	6	3		
S-5	23		5	7	7	1	3
S-6	19	1	8	4	5	1	
B-7	24	2	8	3	9		2
J-8	11		3	6	1	1	
B-9	9		1	4	3	1	

Kampung Code	Children											
	5.9<Age<=12.8			12.8<Age<=19.8				19.8<Age<=26.8				
	N	Primary Education	Junior High School	Primary Education	Junior High School	Senior High School	Academy or College	University	Primary Education	Junior High School	Senior High School	Academy or College	University
J-1	35	10	4		4	4			1	6	4	2	
J-2	47	9	1		5	8				6	16		2
J-3	67	20	2	2	13	11	1		8	4	3	1	2
S-4	42	10		1	5	3			1	2	11		9
S-5	49	4	2	1	3	7		2		2	20	1	7
S-6	40	11	2	1	8	3		1		1	7		6
B-7	26	9		1	3	4		1			3	1	4
J-8	35	4	1		7	8	1			1	6	3	4
B-9	23	5	3		4	4		1			3		3

Kampung Code	Father							Mother						Children			
														No. in age range 19.8<Age<=26.8		No. with education levels 3, 4 or 5	
	N	No education	Primary Education	Junior High School	Senior High School	Academy or College	University	N	No education	Primary Education	Junior High School	Senior High School	Academy or College	University	Boys	Girls	Boys	Girls
J-1	18	0	3	4	7	2	2	24	2	7	7	8			6	7	4	2
J-2	21	0	5	8	8			23	6	8	6	3			8	16	6	12
J-3	25	2	16	3	4			25	4	16	3	2			8	10	3	3
S-4	23	1	9	1	10		2	24	3	12	6	3			9	14	8	12
S-5	23	0	4	5	11	2	1	25	1	5	8	7	1	3	16	14	15	13
S-6	20	1	8	1	6	2	2	23	2	10	5	5	1		8	6	7	6
B-7	25	2	7	3	9	2	2	24	2	8	3	9	0	2	4	4	4	4
J-8	11	0	2	1	7	1		12	0	4	6	1	1		7	7	7	6
B-9	10	0	0	2	6		2	11	0	2	4	4	1		4	2	4	2

Table 19: Changes in households as perceived by residents

Kampung Code	children's health			health of primary income earner		health services				elementary school			
	Better	Same	Worse	Better	Same	Better	Same	Worse	don't know	Better	Same	Worse	don't know
J-1	18	4		18	5	20	3	1		21	1		
J-2	13	10		10	12	17	6			18	5		
J-3	20	4		18	7	18	6			16	7		
S-4	11	9		7	13	11	8		2	11	8		
S-5	15	10		13	11	9	15	1		11	11		
S-6	9	12	1	8	14	13	9			7	9	2	1
B-7	14	7		13	9	14	2			6	8		
J-8	12			2	10	12				11	1		

Kampung Code	employment opportunities				security in kampung			overall socio-economic living conditions			
	Better	Same	Worse	don't know	Better	Same	Worse	Better	Same	Worse	don't know
J-1	12	7	1		20	2	1	17	2	1	
J-2	9	11	1		13	9	1	15	9	1	
J-3	8	16			20	4		17	8		
S-4	6	14			9	12	1	9	13		
S-5	7	12		5	12	13		12	13		
S-6	4	14	1	2	8	13	1	9	12		1
B-7	12	6	1		5	14	4	8	15		
J-8	2	10			12			10	2		

Table 20: Changes in kampung's environment as perceived by residents

Kampung Code	footpath			water			drainage			garbage			sanitation				lighting		
	Better	Same	Worse	Better	Same	Worse	Better	Same	Worse	Better	Same	Worse	Better	Same	Worse	don't know	Better	Same	Worse
J-1	20	2	2	20	2	2	10	5	9	17	6	1	12	4	1		24		
J-2	20	4	1	15	10		16	8	1	8	15	2	3	14	1		19	6	
J-3	23	2		17	3	5	6	14	3	15	7	3	2	22	1		15	7	3
S-4	18	5		7	11	5	11	11	1	12	7	4	13	5	4	1	11	10	2
S-5	20	5		10	11	4	15	10		16	6	3	16	7			15	9	
S-6	8	13		5	15	4	7	13	4	10	12	2	8	12	2		13	10	
B-7	13	7	4	10	9	1	11	9	5	13	9	3	15	7	2		9	15	1
J-8	6	5		8	3		6	5		5	5	1	3	7			11		

Kampung Code	education facilities				health facilities				overall situation		
	Better	Same	Worse	don't know	Better	Same	Worse	don't know	Better	Same	Worse
J-1	20	3			22	2			18	3	2
J-2	18	7			17	6	1		14	10	
J-3	16	7			20	5			17	8	
S-4	10	12			15	7		1	18	4	
S-5	15	10			16	8	1		20	5	
S-6	9	12	1	1	11	10		2	16	6	2
B-7	11	6			16	1	1		17	6	2
J-8	10	1			11				8	3	

Table 21: Conditions of community facilities as perceived by "expert observation"

Kampung Code	footpath				motorable road				local drainage				garbage			
	Better	Same	Worse	don't know	Better	Same	Worse	don't know	Better	Same	Worse	don't know	Better	Same	Worse	don't know
J-1	17	1	3		22	2			5	5	14		13	8	2	
J-2	17	7			16	9			12	8	5		14	7	3	
J-3	10	10	5		15	9	1		5	5	15		10	10	5	
S-4	11	12	1	1	20	5			5	15	4		6	13	6	
S-5	24	1			21		4		21	4			19	6		
S-6	14	6	4	1	21	1	3		6	11	8		10	11	3	
B-7	6	9	8		19	3	3		6	7	12		5	8	12	
J-8	6	5	1		11		1		7	5			5	7		
B-9	6	6			12				5	7			7	5		

Kampung Code	communal toilet/bathing				elementary school				health clinic			
	Better	Same	Worse	don't know	Better	Same	Worse	don't know	Better	Same	Worse	don't know
J-1	9	7	2		18	3	2		14	7	2	
J-2	8	12			21	4			16	7	1	
J-3	12	11	2		15	9			17	8		
S-4	9	6		3	15	8	1	1	15	8	1	1
S-5	12			8	12				14	11		
S-6	9	4	1	4	12	3	5	3	9	8	5	1
B-7	1	2	2		1	2			15	5	2	
J-8	5	6	1		11		1		11		1	
B-9	1				12				5	4	1	

Table 22: Conditions of house/yard and accessibility as perceived by "expert observation"

Kampund Code	roof of house				walls of house				condition of yard			
	Better	Same	Worse	don't know	Better	Same	Worse	don't know	Better	Same	Worse	don't know
J-1	16	6	2		15	7	2		6	10	8	
J-2	12	10	3		10	13	2		5	13	7	
J-3	10	14	1		9	13	3		1	12	12	
S-4	9	8	8		7	12	6		5	10	9	
S-5	13	11	1		11	11	3		8	11	6	
S-6	10	10	5		11	7	7		3	6	14	
B-7	16	7	1		15	9	1		3	12	5	
J-8	8	3	1		9	2	1		7	4	1	
B-9	10	1			11	1			5	4		

Kampund Code	extent of congestion on roads and footpath				degree to which parking contributes to congestion				Average width roads or footpath fronting house
	Better	Same	Worse	don't know	Better	Same	Worse	don't know	
J-1	8	10	6		5	10	8		3 6
J-2	10	11	4		8	14	3		4 3
J-3	3	21	1		4	21			4
S-4	6	7	9		3	11	6	1	2 3
S-5	11	3	11		12	2	7	4	3 8
S-6	9	4	9		9	4	7	2	2 9
B-7		6	19			5	18		2 8
J-8	10	1			10	1			2 2
B-9	4	1	7		1	3	8		3 2

Table 23: Illnesses suffered in last year

Kampung Code	No of Cases of Illness Reported in the Last Year								
	Fever	Skin disorder	Flu/cough	Diarohea	Dysentry	Typus	Dengue Fever	TBC	Other (specify)
J-1	11	1	16	5	0	0	4	1	0
J-2	17	2	21	3	0	1	1	1	2
J-3	17	3	22	1	0	1	1	3	3
S-4	16	5	22	10	1	0	0	0	0
S-5	10	6	23	6	0	2	0	0	0
S-6	14	3	20	7	0	4	0	0	0
B-7	15	3	21	2	3	0	1	0	0
J-8	3	1	8	2	1	0	1	0	2
B-9	5	3	9	3	1	2	0	1	1

Table 24: Monthly household expenditures (Rp. '000 per month)

Kampung Code	Food and Related Essentials	House rent or regular payments	Home repairs/ improv.	Water	Electricity	Cooking fuel	Sanitation	Health Care	Education	Security Charge	Garbage fee
J-1	231.3	36.8	3.2	17.8	31.4	14.8	1.3	10.6	29.1	1.2	1.6
J-2	156.4	15.4	13.2	4.6	23.0	23.2	1.5	9.8	24.7	1.0	1.8
J-3	228.8	3.5	38.0	15.9	15.6	24.2	8.6	5.3	46.8	0.8	1.1
S-4	164.9	5.0	66.4	7.9	12.0	19.6	0.0	38.7	48.7	0.4	1.1
S-5	146.7	5.0	135.5	10.3	11.5	17.0	0.9	23.7	45.6	1.9	0.5
S-6	217.4	5.7	56.1	8.6	23.7	19.8	0.5	15.0	38.1	1.4	1.5
B-7	199.2	14.8	161.6	6.0	19.5	21.6	15.4	18.7	46.8	0.2	1.5
J-8	190.0	5.0	0.0	16.2	16.6	20.8	0.0	5.8	157.9	1.3	1.4
B-9	202.9	0.0	187.5	12.9	27.8	13.8	17.3	11.3	61.6	0.0	1.7

Kampung Code	PBB taxes	Support to other family mem.	Transport	Credit payments	Savings	Arisan'	Durable goods	Other	TOTAL
J-1	2.9	5.2	43.3	0.0	7.9	7.5	0.0	5.0	450.8
J-2	2.7	3.4	25.6	0.0	2.8	4.2	2.0	4.1	319.4
J-3	2.2	1.6	25.2	3.2	17.8	12.0	4.0	1.3	455.8
S-4	2.4	15.8	43.8	27.5	11.7	21.4	0.2	5.0	492.4
S-5	3.0	51.3	42.5	41.8	52.9	27.1	18.1	8.7	588.6
S-6	1.8	18.0	58.4	44.8	48.4	6.8	14.8	12.0	542.2
B-7	2.4	12.4	73.8	63.1	31.0	11.6	94.4	6.4	800.5
J-8	2.5	0.0	65.8	0.0	0.0	11.6	0.0	7.9	502.8
B-9	1.6	16.3	46.2	186.0	47.9	14.0	39.6	87.8	976.2

Note:

* Arisan: community based savings/borrowing group.

Two further categories "Parties and Contributions" and "Clothing" have been excluded due to a lack of uniformity in the inclusion of the expenses at the end of the fasting month a few before the survey took place.

Table 25: Sources of household incomes

Total sources of income from all members of the household

Kampung Code	No of Family	Income Sources	N Male	N Female	Civil Servant		Private company employee		Traders entrepreneurs		Craftsmen service industries		Labourer factory worker		Pension		Other (house room rent, assistance from family, etc)	
					M	F	M	F	M	F	M	F	M	F	M	F	M	F
J-1	24	44	28	16	4	0	8	4	9	4	5	1	1	0	1	3	0	4
J-2	25	56	35	21	10	0	3	1	7	6	7	7	2	2	5	2	1	3
J-3	25	53	34	19	9	3	3	2	9	9	3	3	6	2	0	0	4	0
S-4	24	58	33	25	6	3	6	6	7	6	7	5	2	2	3	1	2	2
S-5	25	64	39	25	8	4	10	6	5	8	4	3	0	3	8	1	4	0
S-6	25	60	38	22	2	0	10	6	14	12	7	1	0	0	2	0	3	3
B-7	25	54	35	19	6	3	9	3	14	12	3	1	0	0	0	0	3	0
J-8	12	22	18	4	9	0	2	1	1	0	3	1	0	1	2	1	1	0
B-9	12	24	17	7	4	1	5	3	3	2	3	1	0	0	1	0	1	0

Sources of income from the head of household

Kampung Code	No of Family	Income Sources	N Male	N Female	Civil Servant		Private company employee		Traders entrepreneurs		Craftsmen, service industries		Labourer, factory worker		Pension		Other (house room rent, assistance from family, etc)	
					M	F	M	F	M	F	M	F	M	F	M	F	M	F
J-1	24	26	19	7	3		3		7	2	4		1		1	2	0	3
J-2	25	26	23	3	5		2		5		6	1			4	1	1	1
J-3	25	27	27	0	5		2		8		3		5		0		4	
S-4	24	22	20	2	5		1		5	1	4				3	1	2	
S-5	25	36	33	3	7		7		4	2	3				8	1	4	
S-6	25	28	26	2	1		4		12	1	4				2		3	1
B-7	25	26	26	0	6		4		11		2				0		3	
J-8	12	14	13	1	9		0		0		1				2	1	1	
B-9	12	16	15	1	4		3	1	3		3				1		1	

Sources of income from spouses

Kampung Code	No. of Family	Income Sources	N Male	N Female	Civil Servant		Private company employee		Traders, entrepreneurs		Craftsmen service industries		Labourer, factory worker		Pension		Other (house room rent, assistance from family, etc)	
					M	F	M	F	M	F	M	F	M	F	M	F	M	F
J-1	24	4	0	4				1		2						1		
J-2	25	6	0	6						4						1		1
J-3	25	13	0	13		2		2		6		3						
S-4	24	9	0	9		2		1		3		2						1
S-5	25	13	0	13		3		2		6		2						
S-6	25	12	0	12				1		9								2
B-7	25	15	0	15		3				12								
J-8	12	2	0	2								1		1				
B-9	12	4	0	4		1				2		1						

Sources of income from children

Kampung Code	No of Family	Income Sources	N Male	N Female	Civil Servant		Private company employee		Traders entrepreneurs		Craftsmen, service industries		Labourer, factory worker		Pension		Other (house room rent, assistance from family, etc)	
					M	F	M	F	M	F	M	F	M	F	M	F	M	F
J-1	24	14	9	5	1		5	3	2		1	1						1
J-2	25	23	11	12	5		1	1	2	2	1	6	2	2				1
J-3	25	12	6	6	4	1	1		1	3				2				
S-4	24	25	11	14		1	5	5	2	2	2	3	2	2				1
S-5	25	14	6	8	1	1	3	3	1		1	1		3				
S-6	25	19	11	8	1		5	5	2	2	3	1						
B-7	25	7	6	1			4	1	2									
J-8	12	6	5	1			2	1	1		2							
B-9	12	2	1	1			1	1										

Table 26: Average Monthly Incomes

No. of family members with monthly incomes in each range

Kampung Code	No of Family	Income Sources	N Male	N Female	25,000 to 100,000		100,000 to 225,000		225,000 to 450,000		450,000 to 850,000		more than 850000		TOTAL (Rp.)	Incomes per family
					M	F	M	F	M	F	M	F	M	F		
J-1	24	44	28	16	0	1	2	3	12	9	8	2	6	1	15,700 000	654,167
J-2	25	56	35	21	3	4	10	6	12	8	8	3	2	0	12,925 000	517 000
J-3	25	53	34	19	1	1	7	6	17	9	6	3	3	0	13,800,000	552,000
S-4	24	59	34	25	6	3	7	13	16	7	4	2	1	0	10,950,000	456,250
S-5	25	64	39	25	2	3	12	15	18	4	4	3	3	0	13,475,000	539,000
S-6	25	64	40	24	2	2	9	7	18	9	7	4	4	2	17,825,000	713,000
B-7	25	59	39	20	5	1	12	9	7	8	12	2	3	0	14,475,000	579,000
J-8	12	22	18	4	0	0	1	0	5	4	9	0	3	0	8,725,000	727,083
B-9	12	24	17	7	1	0	2	3	5	2	3	2	6	0	9,450,000	787,500

No. of heads of household with monthly incomes in each range

Kampung Code	No. of Family	Income Sources	N Male	N Female	25,000 to 100,000		100,000 to 225,000		225,000 to 450,000		450,000 to 850,000		more than 850000		TOTAL (Rp.)	Incomes per family
					M	F	M	F	M	F	M	F	M	F		
J-1	24	26	19	7	0	1	1	1	5	3	7	2	6		11,175,000	465,625
J-2	25	27	23	4	1	2	7	1	7		6	1	2		7,300,000	292,000
J-3	25	27	27	0	1		7		11		5		3		8,000 000	320 000
S-4	24	25	23	2	6		2		11	2	3		1		5,475,000	228,125
S-5	25	37	34	3	2		7	1	18	2	4		3		9,700,000	388,000
S-6	25	31	28	3	2		5	1	13	2	6		2		8,425 000	337,000
B-7	25	26	26	0	5		4		4		10		3		8,475,000	339,000
J-8	12	14	13	1	0		1		3	1	6		3		6 250,000	520,833
B-9	12	18	15	1	1		2	1	4		2		6		7,225,000	602,083

No.of spouses with monthly incomes in each of the ranges

Kampung Code	No. of Family	Income Sources	N Male	N Female	25,000 to 100,000		100,000 to 225,000		225,000 to 450,000		450,000 to 850,000		more than 850000		TOTAL (Rp.)	Incomes per family
					M	F	M	F	M	F	M	F	M	F		
J-1	24	4	4	0			1		3						775,000	32,292
J-2	25	6	6	0			3		3						975,000	39,000
J-3	25	13	13	0	1		4		7		1				2,450,000	98,000
S-4	24	9	9	0			5		2		2				1,850 000	77,083
S-5	25	13	13	0	3		5		2		3				2,375 000	95,000
S-6	25	13	13	0	2		5		3		2		1		2,975,000	119,000
B-7	25	15	15	0	1		6		7		1				2,650,000	106,000
J-8	12	2	2	0					2						450,000	37,500
B-9	12	4	4	0			1		1		2				1,225,000	102,083

No. of children with monthly incomes in each of the range

Kampung Code	No of Family	Income Sources	N Male	N Female	25,000 to 100,000		100,000 to 225,000		225,000 to 450,000		450,000 to 850,000		more than 850000		TOTAL (Rp.)	Incomes per family
					M	F	M	F	M	F	M	F	M	F		
J-1	24	14	9	5			1	1	7	3	1			1	3,750,000	156,250
J-2	25	23	11	12	2	2	2	3	5	5	2	2			4,650,000	186,000
J-3	25	12	6	6				2	5	2	1	2			3,125,000	125,000
S-4	24	24	10	14	2	3	3	8	4	3	1				3,250,000	135,417
S-5	25	9	1	8	1			8							825,000	33,000
S-6	25	15	7	8				1	4	4	1	2	2	1	5,800,000	232,000
B-7	25	10	8	2			5	2	2		1				1,600,000	64,000
J-8	12	6	5	1					2	1	3				2,025,000	168,750
B-9	12	2	1	1						1	1				675,000	56,250

ANNEX G

Profiles of Kampungs Surveyed

JAKARTA
Kampung Name:
Tanah Tinggi
RW No.: RW XI

Kelurahan Name:
Tanah Tinggi
No. of Rws: 13

Details of Selected RW:
Area: 3 ha. (4.8%)
Population: 3,472 (5.5%)

Description of Kelurahan:
Inner-city kampung in the center of Jakarta. Close to big market area of *Pasar Senen*. Some areas have larger houses with garages. The kelurahan was linked with colonial times as many Dutch people had their homes here. Some parts are nicely laid out with children's play areas. Other parts are crowded and dirty. Tanah Tinggi has a number of social problems, such as drugs, drinking, and inter-school fights.

Description of kampung:
There are two distinct areas: the lower-income and the higher-income areas. In the lower-income areas, overcrowding is a problem. Recent fires in the adjoining RW have made the community wary. They are aware that fire engines would not have access to the interior. Community spirit is reasonable and maintenance is reasonable, although drains were dirty and smelly. The nearby RW is better off: houses are larger, roads are good and well laid out, and most residents have their own transportation. Community spirit is not good, however. There is no *gotong royong*, and most residents do not know who their neighbor is. There has been a high turnover of houses in the last ten years or so. Houses were originally built for the Dutch army, and the land still has the old colonial status, Egendom Verponding. After independence many ABRI took over the houses.

KIP Details:
KIP in 1974 built footpaths and drains. Many suffered partial loss of their land or houses, with no compensation. Community leaders organized *gotong royong* to help those less able to repair the damage. In the overcrowded area there are no roads entering. Roads with drains were put in the better areas nearby. There appears to have been a number of projects in Tanah Tinggi, and it is difficult to get reliable information on what improvements were carried out under which project.

Environment:
The level of the roads was raised with KIP. As a consequence, some houses suffered minor flooding until the residents raised the level of their houses. Rubbish collection is good and sanitation seems reasonable. Most houses have had their own taps since 1989. The water supply from PAM is not good, especially in the middle of the day. The area is notorious for social problems, including drugs, drinking, fighting, theft, and even murder. Some say this has been a factor in keeping housing/land prices below other areas.

Land and House Values:
A leased house in RW XI: Rp 600,000/year (4x8m).
In 1978, 30 m^2 bought for: Rp 600,000 and 18 m^2 for: Rp 100,000.
Rp 180,000/m^2 is being paid as compensation for the land on which the flats are being built. However, the money is being retained as a down payment on one of the flats. Rp 300,000 to Rp 400,000 is being paid per family to rent accommodation until the flats are ready.

Study Methodology:
The *Lurah* was visited to collect secondary data. The leader of the RW XI was also visited. Interviews were held with him, small traders, women, and newly arrived families. In addition, the leader of the more wealthy area was visited, as were traders.

Key Findings:
- Despite its reputation, there is a close community spirit in the lower-income housing in Tanah Tinggi. It seems that the trouble spots are along the main roads just outside the kampung. The community in these areas is very stable, although there are a lot of migrant workers lodging in the homes of others on a monthly basis.
- Maintenance was not well done, and there was not much done along the footpaths to improve the overall appearance of the kampung (as in Surabaya).
- The better area was reasonably well maintained, but there was little community spirit. Community leaders were difficult to get in touch with, and there was a high turnover of people

JAKARTA
Kampung Name:
Kebun Pisang, Kebun Sayur
RW No.: II

Kelurahan Name:
Manggarai
No. of Rws: 12

Details of Selected RW:
Area: 6.5 ha. (7%)
Population: 4,028 (9.9%)

Description of Kelurahan:
Manggarai was once considered a fringe kampung, although it is an inner-city now. The large station and workshops for the railway company are in kelurahan and provide employment for many residents. There are housing complexes for railway employees in the kelurahan. The area used to be a swamp and was settled by squatters after it had been filled.

Description of Kampung:
Sometime before the war this swampy was filled in, and the railway workers housing complex was built. After the war people from central and East Java began to migrate into the area and built temporary squatter homes. There was plenty of space to grow vegetables and bananas, giving the kampung its name. As the original settlers found work, their families and friends from their home villages came to join them, giving rise to community groups from specific areas. The groups from Cirebon, Purworejo, and other areas are still there and linked to certain roads or paths in the kampung. From 1960 people began to make semi-permanent homes, although the status of the land was unclear. By 1971, when the Jakarta authorities restricted the flow of migrants into the city, the area was full. In 1974 the community formed a board to look into the status of the land. The board went first to the Railway company that they thought owned the land. The Railway company sent them the Department of Public Works, which had filled the land, and the this department sent them to the Agraria Department, which dealt with land rights issues. In 1976 the residents were granted the status of Right to Use the land and paid Rp 7,500 for this right. Before the tenure rights were granted, the kampung was improved by KIP. Some houses and fences were moved, but most did not object as it was obviously going to improve the area. Some flexibility was given in the design in order to avoid serious damage to property. There is no evidence that KIP was linked to the granting of land rights or vice versa. However, the timing of the events suggests that they might have been. Electricity was put in 1977, and water supply in 1990.

KIP Details:
Footpaths, roads, and drains were provided under KIP in 1975. There were public toilets in the kampung, provided by the government in 1990 and built with community funds in 1994.

Environment:
There used to be floods from an old drainage channel. The main channels were improved and expanded so that the branch at the back of the kampung is bypassed except in extreme circumstances. However, there is now no flushing of human and solid waste, which leads to an unpleasant environment in the proximity. Digging up roads and paths to provide the additional services has sometimes damaged KIP infrastructure.

Land and House Values:
House bought in 1993 (12x5 m^2) for: Rp 7,500,000.
House bought in 1994 with Hak Garapan (7.5x3 m^2) for: Rp 5,500,000.

Study Methodology:
The *Lurah* was visited and secondary data was collected. The head of RW II was also visited. He introduced us to other community leaders. Discussions were held with women's groups, traders, and newly arrived families. Surveys were carried out in this and neighboring Rws, including some that are now in neighboring kelurahan. Spot checks of the surveys were carried out and visits made informally to neighboring areas.

Key Findings:
- KIP may have been linked to the securing of land tenure rights by the residents.
- Environmental problems were caused by the disposal of solid and human waste into an unused drainage canal.
- Maintenance of KIP infrastructure was being carried out by Swadaya masyarakat, but damage has been caused by subsequent installation of other facilities.
- Complaints were frequently heard regarding the quality of PAM water supply.

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INDONESIA
IMPACT EVALUATION STUDY
URBAN DEVELOPMENT PROJECTS
LOCATION OF SURVEYED AREA:
TANAH TINGGI, (KIP) JAKARTA

AREA OF SURVEY WITHIN THE KAMPUNG

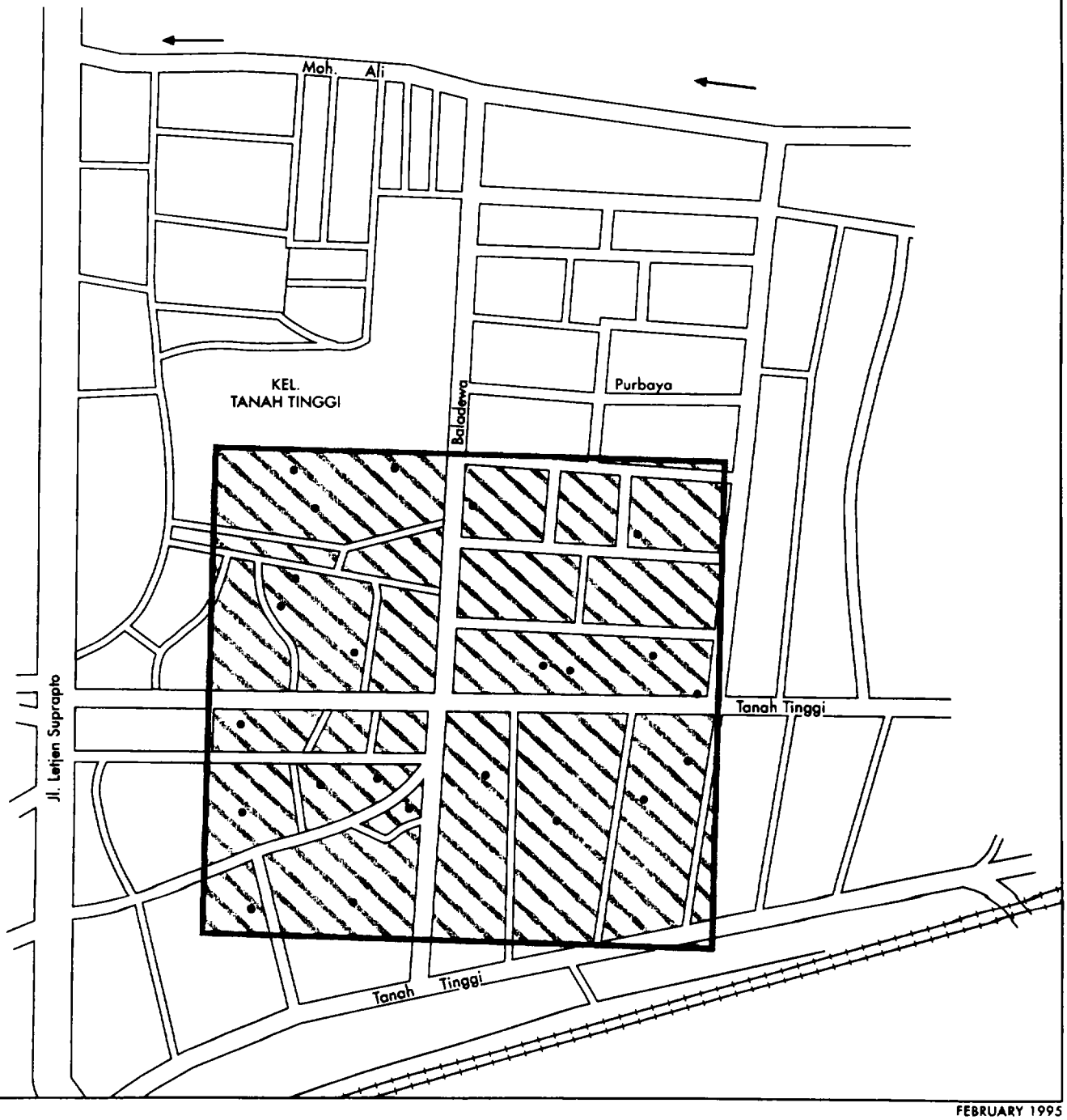
HOUSEHOLDS INTERVIEWED

FLOW OF RIVER

RAILROADS

N

0 100 200 METERS



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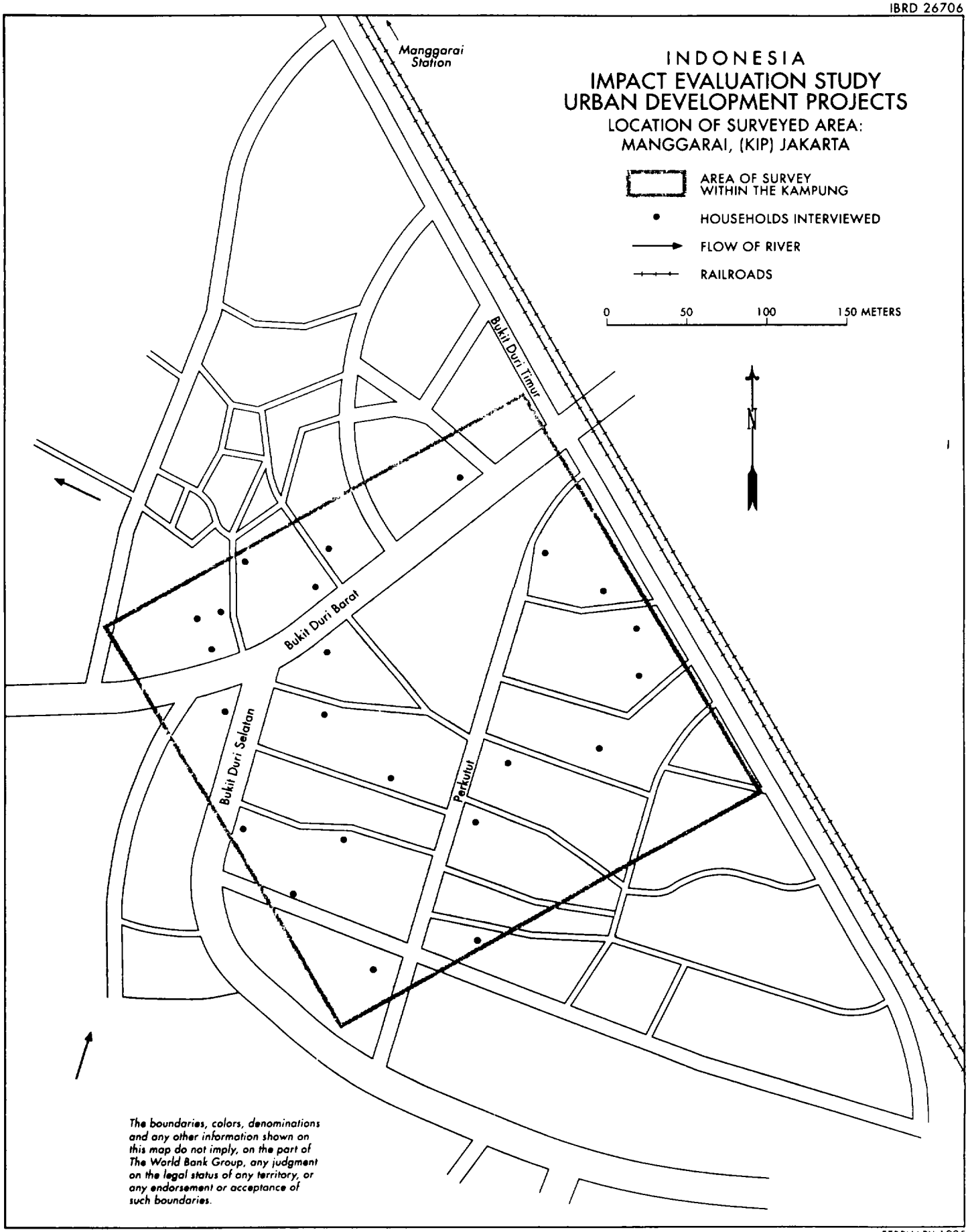

Manggarai Station
INDONESIA
IMPACT EVALUATION STUDY
URBAN DEVELOPMENT PROJECTS
LOCATION OF SURVEYED AREA:
MANGGARAI, (KIP) JAKARTA
AREA OF SURVEY WITHIN THE KAMPUNG
HOUSEHOLDS INTERVIEWED
FLOW OF RIVER
RAILROADS
0 50 100 150 METERS
N
Bukit Duri Timur
Bukit Duri Barat
Bukit Duri Selatan
Perkutut
The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.

JAKARTA
Kampung Name:
Muara Baru
RW No : XVII

Kelurahan Name:
Penjaringan

Details of Selected RW
Area: No information
Population: 14,000 (22.1%)

Description of Kelurahan:
Recently developed industrial area near the port. Factories and light industries have developed in the kelurahan. Some real estate and high-income housing has been developed, but pockets of slums remain between the factories. High daily migration into the factory areas has caused a number of social problems.

Description of Kampung:
Used to be a coastal swamp area near the port. Material from the excavation of the reservoir was dumped there, filling in the swamp. Squatters started to moved in the 1950s through the 1970s. Many of the early squatters were Bugis and Makassar from Sulawasi because of the proximity of the Sunda Kelapa harbor, where the Buginese boats docked. All the houses were non-permanent. House transactions were made, but not in writing. Certificates were not exchanged. Since 1975 people have begun building permanent houses and housing transactions have been written down and reported to the *Lurah*. Most residents are officially still squatters and have no rights to the land. Electricity came in the 1970s, water supply in 1989/90, and telephones in 1993.
A large fire in 1993 burnt down hundreds of houses. The houses were rebuilt 1 m further back so that a road wide enough for a fire engine could enter the kampung.
A second fire last year destroyed 450 homes. The fire started in a factory and the factory was paying compensation of Rp 12 million total. The victims have refused this amount and will not let the factory rebuild until their compensation has been raised. About 60% of the residents are factory workers, 10% merchants, and 10% fishermen.

KIP Details:
No KIP project in the selected RW, although neighboring Rws have been part of a KIP project because it is an area designed for commercial development.

Environment:
The kampung is next to the reservoir controlling the entry of the drain water into the sea. As the drains empty into the reservoir, they bring with them all the rubbish thrown into them on their passage through Jakarta. The rubbish is removed from the drain at this point, making a dump on the other side of a narrow channel from the kampung. Apart from the severe environmental impact this has in terms of odor and health hazards, there are newly arrived squatters building homes on top of this dump. This settlement is within the kelurahan, but the kelurahan will not take responsibility for it. The survey team was told that the kelurahan officials could not be responsible for their safety if they crossed into this settlement. Their advice was heeded. The rubbish itself gives off a foul odor, often accompanied with thick smoke as it is often burning. Clouds of flies settle everywhere, posing a severe health threat. The incidence of diarrhea is higher along this northern coast than anywhere else in Jakarta. As a result the WHO is running a three-year project which supplies free rehydration solution and treatment for diarrhea. Despite this, only one family in the primary data survey reported having diarrhea last year. This could be due to a reluctance to report it for fear of follow up from the Health Department. It could also be that diarrhea is so common that it is not considered an illness unless it is very severe. There are few privately owned toilets in the area. Until a few years ago people still used the sea or drains as toilets. Now there is at least one privately owned public toilet which has opened in the last year or so. The drains are filthy and are rarely cleaned out. There is no groundwater in the area, it is all saline now. Water vendors were in abundance, but there is now a clean water supply in the area. People still sell water in the kampung.

Land and House Prices:
4x10 m house bought for: Rp 13 million last year.
5x8 m non-permanent house recently sold for: Rp 8.5 million.
6x10 m empty land bought in 1980 for: Rp 300,000, now worth about Rp 20 million with permanent house.

Study Methodology:
Visited kelurahan office, collected maps and secondary data, and held discussions with the *Lurah*. Visited the head of the RW and toured the kampung with him. Primary data surveys conducted. Visits were made to long-time residents and a *sambal*-making industry. A visit was made to one of the POSYANDU volunteers and to family who have recently moved in.

SURABAYA
Kampung Name:
Kedung Doro
RW No.: XI, XII

Kelurahan Name:
Sawahan
No. Rws: 13

Details of Selected RW
Area: 6 ha. (6.67%)
Population: 4,600 (19.4%)

Key Findings:
- Community put in roads after first fire.
- Many children do not go to school, and the POSYANDU is not as active here as in other areas. It has only been running for 5-8 years.
- Water vendors buy water for Rp 25 per pikul and sell it for Rp 100.
- Many social problems in the area, including drinking, gambling, theft, prostitution, were reduced temporarily by the Clean-up Operations now being implemented by Jakarta police.
- Despite its problems, there is no unemployment in the area, and there is a huge potential for supplementing incomes by selling food to the huge local work population which travels in each day. Because of the work opportunities, the price of land and rental rates are relatively high.

Description of Kelurahan:
Inner-city area, mostly residential with commercial areas along the main roads. Some large houses, high-income area on the west.

Description of Kampung:
Since the 1930s, gang 1-5 was surrounded by *sawah tegal* and swamp. Most of newcomers came from a kampung nearby when they were evicted by the Dutch for developing a commercial area. Most are private company employees. Also, a large number have small industries. Gang 1-5 land status is still from colonial times (Eigendom Pervonding). Gang 6-12 have certificates. About 80% of the population originate from another kampung. Most of the latest arrivals were evicted in 1989 from an area nearby where there is now a department store.

KIP Details:
KIP program in 1982 included roads, footpaths, drains, MCK and health extension. Rubbish disposal is done by the city.

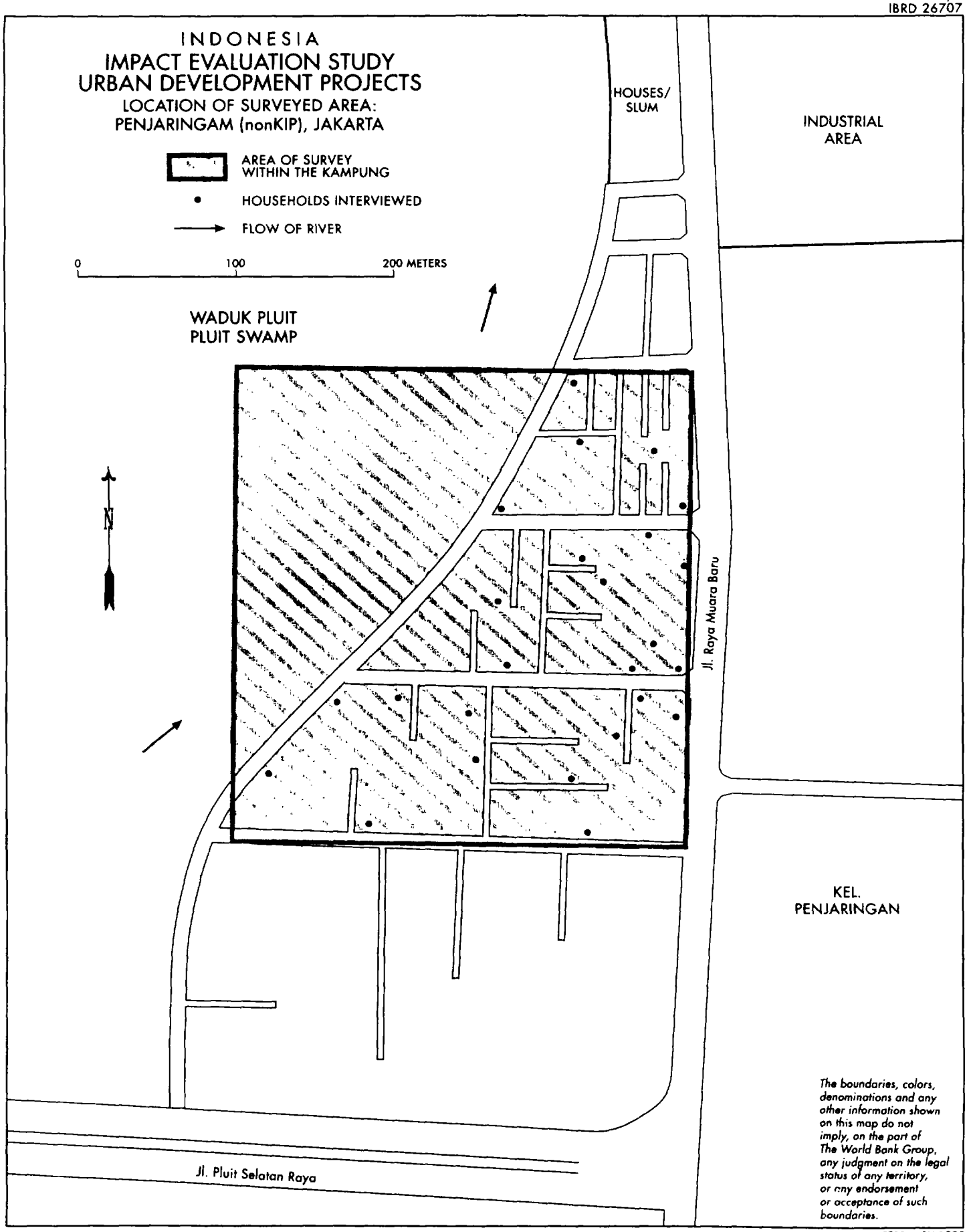
Environment:
Floods before KIP, but were quickly dispersed. Now they have been made worse because the level of the river has risen and levels of nearby areas have also risen. The government has proposed that a flood bund be built along the drain bank. Many houses below the level of the new road are more prone to flooding. Before KIP, it was a high fire risk area because fire engines could not get in. Now they can. A clean area with lots of trees and plants was planted at the sides of the roads by the women to stop pollution from entering the houses. Rubbish is collected daily and taken to collection point nearby. However, during the long Muslim holiday, when the garbage collectors are on holiday, the rubbish smells after a few days

Land and House Prices:
In 1992, 3.5x20m of land with permanent house was sold for Rp 10,000,000. After buying, the new occupant raised the floor level and put in ceramic tiles for Rp 2,500,000.

Study Methodology:
Meeting with *Lurah* and collecting maps and secondary data. Primary data survey centered on kampung Kendung Doro, in RW XI and XII. Discussions with a group of long-term residents, including community leaders; discussion with group of six women, including PKK officials; nine small industries visited separately; walk through RW XII and a visit women's cooperative offices; discussion with two residents who had lost part of their houses during KIP; visits to two families who had recently moved into the kampung.

Key Findings:
- Most long-term residents own houses passed down though families, land values are high so there is little fear of eviction.
- *Gotong royong* and community spirit is high, good conditions.
- KIP improvements are still good and do not require any improvements yet. The improvements are well looked after, with restrictions on cars entering. Also regular maintenance and cleaning done by *gotong royong* once a fortnight. Emergency vehicles only are allowed in.

INDONESIA
IMPACT EVALUATION STUDY
URBAN DEVELOPMENT PROJECTS
LOCATION OF SURVEYED AREA:
PENJARINGAM (nonKIP), JAKARTA



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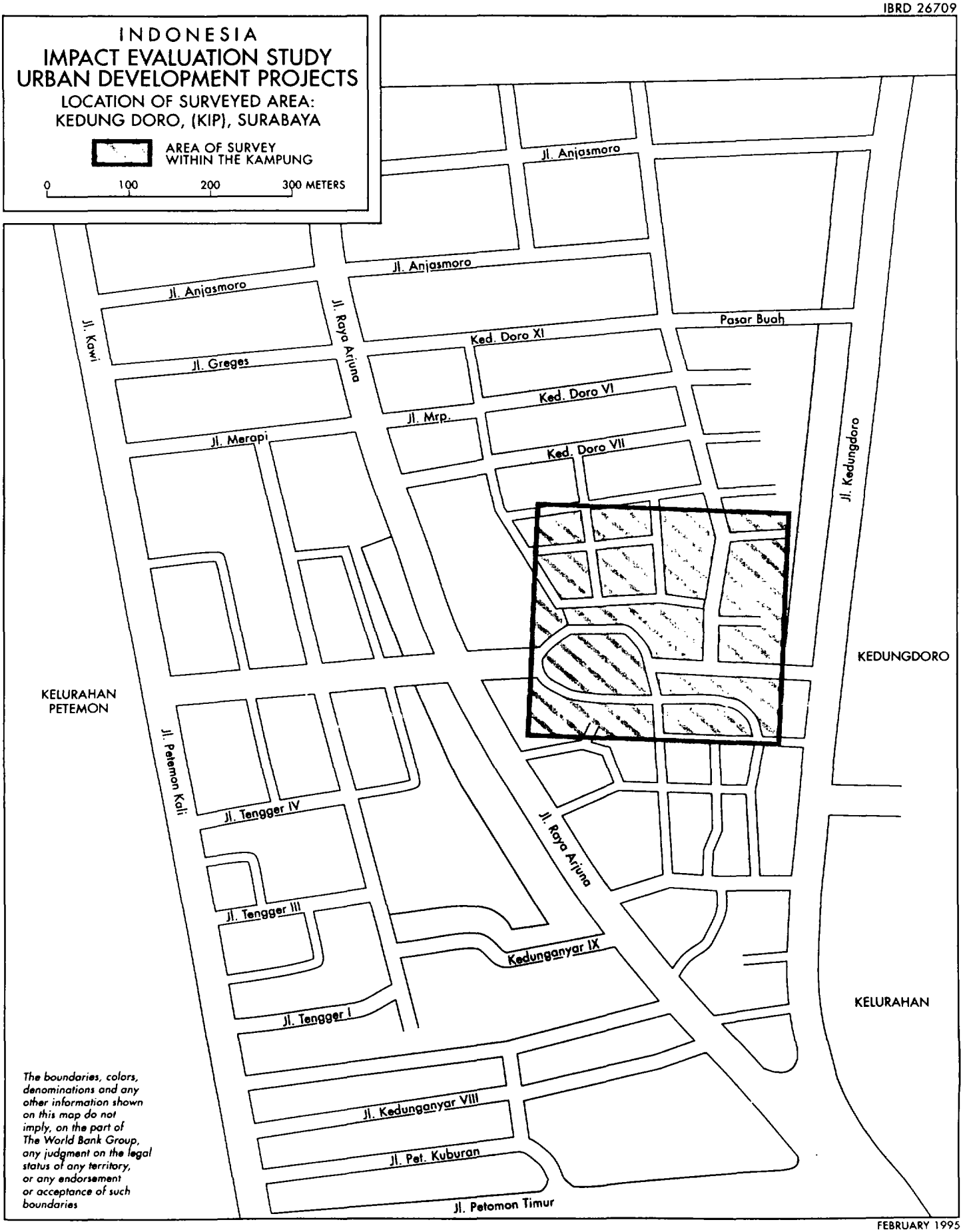
INDONESIA
IMPACT EVALUATION STUDY
URBAN DEVELOPMENT PROJECTS
LOCATION OF SURVEYED AREA:
KEDUNG DORO, (KIP), SURABAYA

AREA OF SURVEY WITHIN THE KAMPUNG

0 100 200 300 METERS



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FEBRUARY 1995

- Kampung is now well organized, although some had to loose land and houses in the KIP program. Now health is much better.
- Consultation and coordination through kelurahan and RW and public participation is encouraged.
- Many small traders and enterprises started, some of which can be linked directly or indirectly with the KIP program. Economy of the whole area has been raised as a result.
- Reasons given by new residents for moving into the area were: good school facilities nearby; close to markets, public transportation, and workplaces; the environment was very clean and pleasant.
- RT 1-5 were asked to move by Pemda but they asked for Rp 1 million/m^2, even though they are not certified.
- Favorable impressions of the environment and community spirit were gained during the fieldwork. It was among the most pleasant kampungs to work in of those included in the study. However, this clean and friendly environment is not reflected in the primary data survey which puts Kedung Doro as one of the lowest economically, and in many other subjects, such as dwelling conditions.
- came as a surprise and yet there is no obvious reason why this should be. The number of small industries is also not reflected in the quantitative data.

SURABAYA
Kampung Name:
Jagir Sidomukti
RW No.: RW III

Kelurahan Name:
Jagir
No. of RW: 13

Details of Selected RW
Area: 9 ha. (8.9%)
Population: 4,819 (23.9%)

Description of Kelurahan:
Periphery of the city, but now within built-up area. It became a separate kelurahan in 1975, although the kampungs were already there. It used to be in kelurahan Wonokromo, where there is a large market. There are a number of squatter settlements along the railway lines. Jagir is now a pleasant residential area.

Description of Kampung:
1960-65 There was a dairy farm in the location. Some of the employees had houses there, and there were some temporary houses, particularly around the Pertamina factory. When the dairy went bankrupt, many employees stayed on the land and grew *palawija* crops to sell at Wonokromo market. Land status was Right of use for building (HGB).
1956-67 Migrants began to come into the area and wanted to pay compensation to the cultivators so that they could build dwellings on the land. No written agreements were made but the cultivators divided the land into plots for use by newcomers who wanted to settle.
1967-68 More people moved in from outside Surabaya and kampung Sidomukti was formed. The houses were all temporary.
1970-77 Most of the people came and there were many unofficial land and house transactions.
1978 The city of Surabaya authorities changed the status of the land from HGB in the name of the dairy to Right to rent (HS) to the residents. The area was given the status of residential on the city master plan. Despite this, many do not have the "green letters" as tenants, and many are reluctant to arrange it.
1978-80 The land had started to fill up, although the gardens of the houses were still quite large. Some of those who had been issued with the land tenancy green letters started to build permanent houses. The roads were still unsurfaced, and muddy when it rained.
1982 The KIP project began in August.
After 1982, Most of the houses replaced with permanent ones. Many planted plants and trees to guard against pollution. More people got permission to build houses and to rent the land from the city.

KIP Details:
KIP in 1982 under Urban III:
- 80% Tarmac roads, 4 m wide or more, suitable for four wheel vehicles, with drains either side;
- 20% concrete paved footpaths less than 4 m with drains either side;
- clean water supply

Many lost fences or some of their gardens (about 20% of 1,000 houses) but the importance of the improvements and the impact they would have on the kampung were well understood so that no one complained. The residents along one alley refused to be part of the program, but after they saw the impact that the improvements had and requested the improvements. In 1991 a second project to upgrade another road was instigated. This project was under the WR *Supratman* program, where 60% was paid by the government and the rest by the community. A committee was formed of members of the community who were responsible for participating in the design and also for collecting the community contribution. The contribution was Rp 500

per m^2 and an additional Rp 1,000 for each motorbike or Rp 2,500 per car. The total project cost was Rp 39 million.

Environment:
Very clean, rubbish fees are Rp 1,000 per month. It is collected every day and taken to a collection point about 1 km from the kampung. More cars are coming into the area but not yet at the level to cause a serious pollution or congestion. Fire risk is low because of good building materials, and no serious overcrowding exists. Drainage is good. Drains are cleaned out by *gotong royong* (community mutual cooperation) each week. Good water supply now goes to most houses since the pipe was replaced with a larger diameter pipe in 1993.

Land and House Prices:
Last year one resident bought 5x20m plot for Rp. 15 million with a basic house and Hak *Sewa* status from the city. He built a new house on the land for Rp. 13 million.
10x20m with house worth approx. Rp. 40-50 million
In 1985 one house of $150m^2$ bought for Rp. 7,000,000

Study Methodology:
Introduction to the *Lurah*, collection of maps, and secondary data. The team met with the head of RW III and his assistant who have both lived in the area for 30 years. Group discussion with him, his wife and friends who had lived there for many years. Primary data survey undertaken. Meeting with six ladies including officials from the PKK. Discussions with newly arrived family and traders.

Key Findings:
- The impact of the KIP project at a time when the kampung was still in the early stages of development and there were few permanent homes was a crucial factor in the development of what is now a clean, organized and pleasant residential area.
- Community participation was an important part of the KIP project and subsequent maintenance has been good.
- As the area has developed so have the opportunities for traders, dressmakers, salons, etc.
- Residents feel that although they only have *Hak Sewa*, they are secure and there is little chance of eviction. They feel there is a good chance that they will be able to get *Hak Milik* eventually. KIP was one of the factors in building up the environment to give this security.
- The kampung has now become an attractive place for people to live, the pleasant environment, paved roads, and land status have put it in demand. People are moving in from other areas because it is better there.

SURABAYA
Kampung Name:
Blauran Kidul
RW No.: II and I

Kelurahan Name:
Genteng

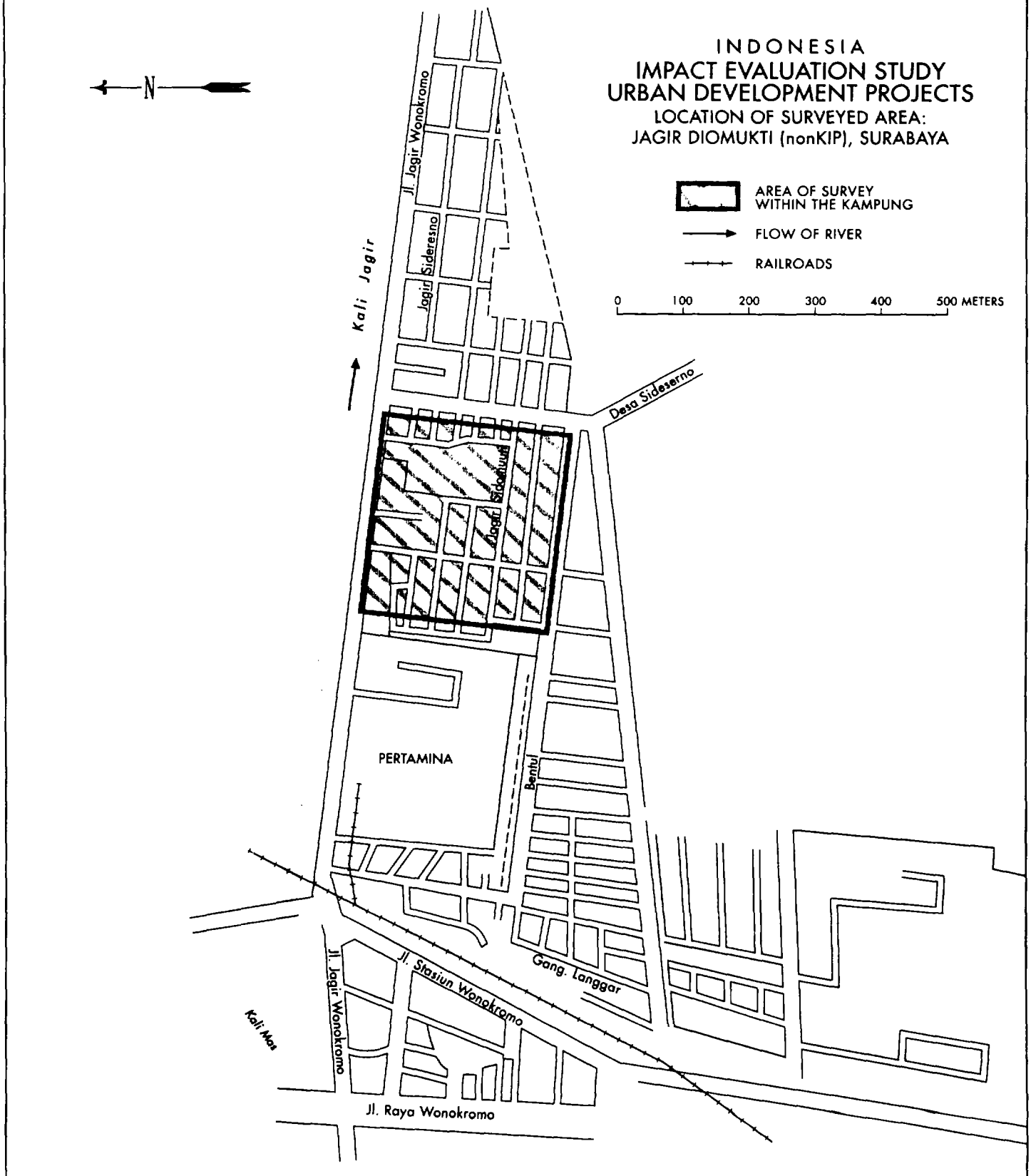
Details of Selected RW
Area: 4 ha. (7.5%) Population: 820 (10.2%)

Description of Kelurahan:
Inner city kampung within Surabaya's golden triangle, lots of office development nearby in recent years. Many shops and markets surround the kampungs, and the health and school facilities in the kelurahan are good. The kampungs are densely populated.

Description of Kampung:
The two Rws were covered in the study. RW I has existed since the 1930s, the houses are small but mostly permanent. Many have Right to Ownership and most have PDAM water supply and toilets in their homes. RW II is densely populated, the houses are very small and the gangs are very narrow. Many people do their cooking and washing up in the gangs, and 20 families still get water from a public tap. Water supply came in 1975, drains were built by Swadaya masyarakat in 1975.

KIP Details:
The community leaders asked twice to be included in KIP and they never received an explanation as to why they were not included. In 1985, one road was built into the kampung under the WR *Supratman* program where the community paid 40% of the cost. This road was surfaced in 1992 by the community (*swadaya masyaradat*).

Environment:
The environment in RW I compares with a KIP kampung, some had planted trees and plants, and most had their own water supply and toilets. There were public toilets and water supply in RW II, the drains were not cleaned and the fire risk was very high. Rubbish (wet and dry) is collected regularly.



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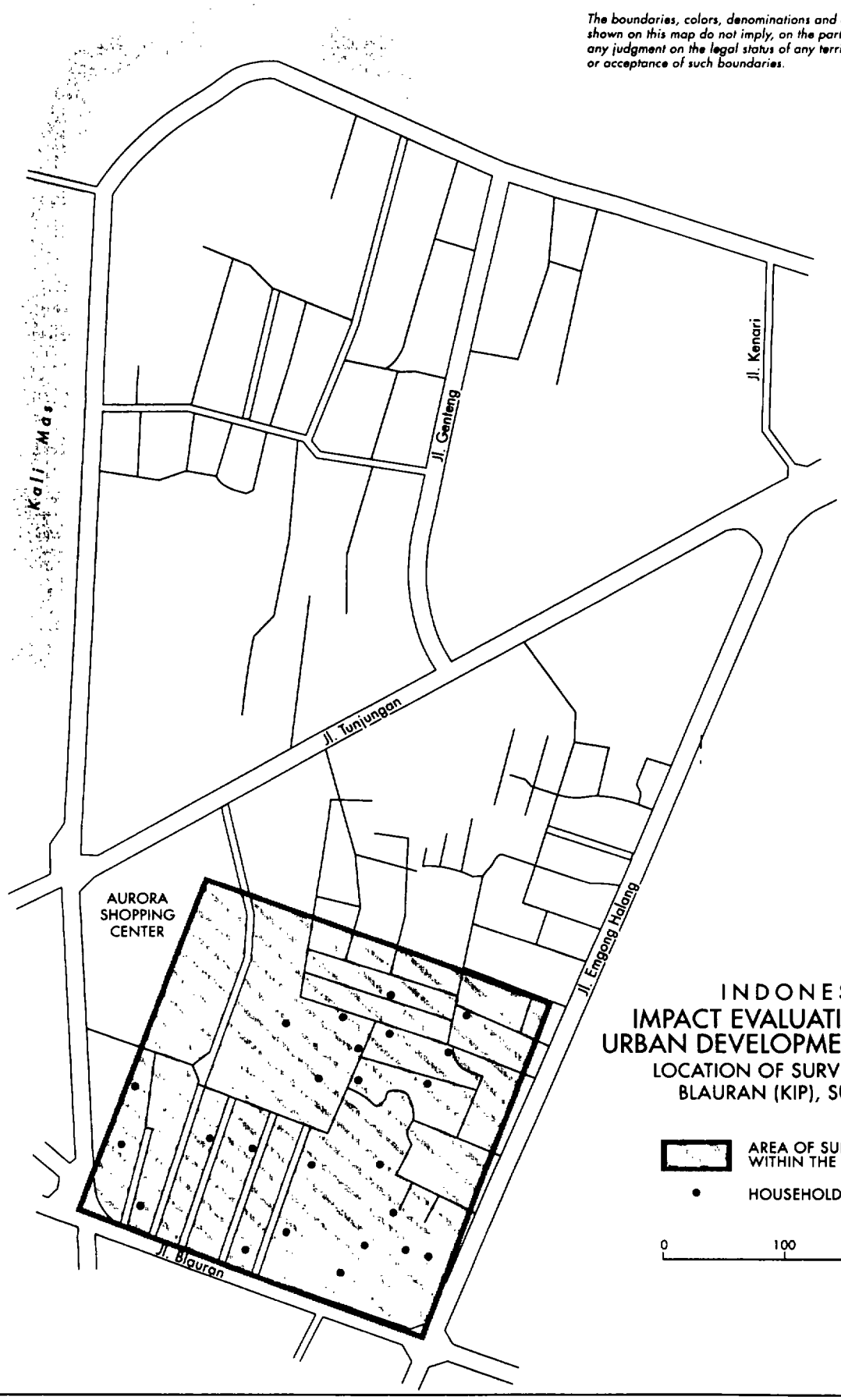
FEBRUARY 1995



INDONESIA
IMPACT EVALUATION STUDY
URBAN DEVELOPMENT PROJECTS
LOCATION OF SURVEYED AREA:
BLAURAN (KIP), SURABAYA

AREA OF SURVEY WITHIN THE KAMPUNG

HOUSEHOLDS INTERVIEWED

0 100 200 METERS

FEBRUARY 1995

DENPASAR
Kampung Name:
Banjar Catur Panca and Banjar Pekambingan

Kelurahan Name:
Dauh Puri
No. of Rws: 2 banjar

Details of Selected RW
Area: 13 ha. (4.7%)
Population: 625 (5.87%)

Land and House Prices:
4x12m bought in 1989 for Rp. 9,000,000 with *hak milik*, rented out for Rp. 750,000 per year until family that owned it moved in 1993.
4x6m house contracted for Rp. 1,000,000 per year

Study Methodology:
Discussions were held with current community leaders, and also past leaders. A group interview were held with women and POSYANDU helpers. Individuals with people running small industries and new families

Key Findings:
- There was a feeling of insecurity through threat of eviction. Members of the community were reluctant to talk to us unless through the RW. Many think it is only a matter of time until a developer comes in and they have to move.
- There is a high rate of employment as most work in the nearby shops and markets.
- The community works together to maintain facilities, clean the drains, etc.
- There are a mixture of land tenure rights, many in RW II would say they own the land but do not.
- Most women are working.
- *Hak Sewa* from city authorities is for example Rp. 36,600 for 120.5m^2.
- Theoretically *Hak Milik* may be requested after 20 years but no one has yet tried this.
- Many houses have been passed down for a number of generations.
- 11 out of 50 houses in gang 4 are contract.

Description of Kelurahan:
Old desa split into 5, Dauh Puri was the original one and became official in 1980, the other four were made official in 1982. At present, Dauh Puri is near the center of Denpasar and would appear to represent an inner city kampung, however, the development of Denpasar has been so rapid in the last 20 years that even this kelurahan was partly agricultural in the 1970s. On the east are higher income settlement areas, the center is mainly commercial and shopping areas. The study took place in the western edge of the kelurahan, an area of lower income housing with large market areas along the main road. 1970-74 was the time of most in migration.

Description of Kampung:
1965 people came in and bought the last of the *sawah* land already divided up into lots. About 90% is inherited land. 10% state owned, mostly in the business and shopping areas. HGB for 10 years at a time.

KIP Details:
The study are was improved under KIP in 1982-83. No maintenance or further upgrading since KIP. In need of some maintenance now.

Environment:
Lots of rubbish in the river, drains not well maintained, generally dirty, rubbish thrown on empty ground.

Land and House Prices:
No information

Study Methodology:
The *Lurah* was visited and he introduced us to the leader of the RW. Group discussions were difficult to organize so interviews were held
on a more ad hoc basis with women, traders and a newly arrived family.

Key Findings:
- Land bought straight with *Hak Milik*, most Balinese families have inheritance rights in the family name.
- The KIP program occurred during a time of rapid development when much of the land was being converted from rice fields into housing and commercial areas. The provision of roads and drains at this time was vital to ensure that environmental problems linked to access and flooding were reduced. All roads were earth before KIP. Some of the footpaths had been made before but were replaced. Banjar halls are made with Swadaya masyarakat, outside Denpasar a lot of improvements are done with this program. Most people had no clear recollection of the project, just that the government came and made the road.

- O&M of the improvements is poor; it seems that the coordination preparation or consultation before the project has lead to a situation where the roads, paths and drains are seen as government property, to be maintained by the government.
- Despite the continued development since the time of the project, the facilities are still reasonable adequate.
- There were few negative impacts from the KIP program, the population density was less than in Java and people owned larger plots of land. We heard no reports of people who had lost land or buildings for the project. In addition, many new plots of land were being sold off at that time and had been subdivided allowing for roads and paths.
- Denpasar has recently become a city (*kotamadya*), the lines of coordination and communication between government departments and the community are only roughly in place, a great deal of adjustment is needed as part of the process of changing from a small provincial town surrounded by agricultural land and rural village to a modern urbanized city. New administration boundaries are being drawn up continuously, but it will inevitable take time to make the adjustments needed.
- Used to be much flooding and still is although many projects have been put into relieve the situation.
- Temporary residents from Java and Lombok cause problems in the area, about 100 people have little respect for the areas cleanliness.

Standards used in Denpasar seem to have been different: no inclusion of planted areas, less standardization.

JAKARTA
Kampung Name:
Malaka Sari
RW No.: IV

Kelurahan Name:
Malaka Sari
No. of Rws: 10

Details of Selected RW
Area: no information
Population: 748 (11.6%)

Description of kelurahan:
Sites and services developed from a rural area on the outskirts of Jakarta. Main roads and public transport into the city. Mixed housing types with the majority aimed at low income groups. Separate kelurahan formed after the area was developed.

Description of Kampung:
Used to be in West Java province, agricultural area growing fruit trees, coffee and rubber. Scattered houses, residents all Betawi. After the development most moved to outside but some stayed inside. Initially there were strict controls on the type of improvements which could be made to the houses. After three years started paying off the mortgage and given Right to Build on the land. Good school and health facilities. Most would take children to doctor not health center if required. Since moving in the transportation, markets, etc, have improved.

Environment:
Clean and pleasant, good rubbish collection.

Land and House Prices:
No information.

Study Methodology:
Visited the *Lurah* and then focused on one of the RW. Visited the leader and met with other community leaders. Some spot checks of the survey were done giving an opportunity for more in depth discussions with kampung residents. Talked to residents living outside the sites and services area about the indirect impacts of the project.

Key Findings:
- Some impact on surrounding areas but not as great as in Denpasar sites and services. Many tradesmen moved in to work on the home improvements taking place. Now, these people work in the developments due to expansion of the city of Jakarta.
- Less women working in this area than in any of the other study areas. There is less available local work and possibilities for small enterprises are limited.
- Most of the original occupants still live in the houses. The houses which have changed hands tend to have been the older houses.
- There has been an increase in the local economy seen in the types of improvements made to the houses.

DENPASAR
Kampung Name:
Tegal Warta (dusun)
Dusun No.: I

Kelurahan Name:
Tegal Kerta
No. of dusuns: 8

Details of Selected RW
Area: 2172 ha. (9.44%)
Population: 720 (10.3%)

Description of Kelurahan:
Used to be in Pemecutan until 1989. Pemecutan divided into three areas, two in the sites and services area. It was mostly *sawah* with one
or two houses, before 1980. The development of the sites and services area had a big influence and rapid development occurred on the fringe following the building of a bridge.

Description of Kampung:
The sites and services are is well laid out with different sizes of houses. The larger houses are along the roadsides and have garages. Alleys leading off the main roads are wide enough for access by car although they were not specifically designed for this. The houses off the alleys are smaller. Currently, many of the house owners along the alleys own vehicles. Social organizations along the lines of those in Java are strong. Many small businesses have started up. Schools in the area are good though unevenly distributed. Religious and sports facilities were provided as part of the project.

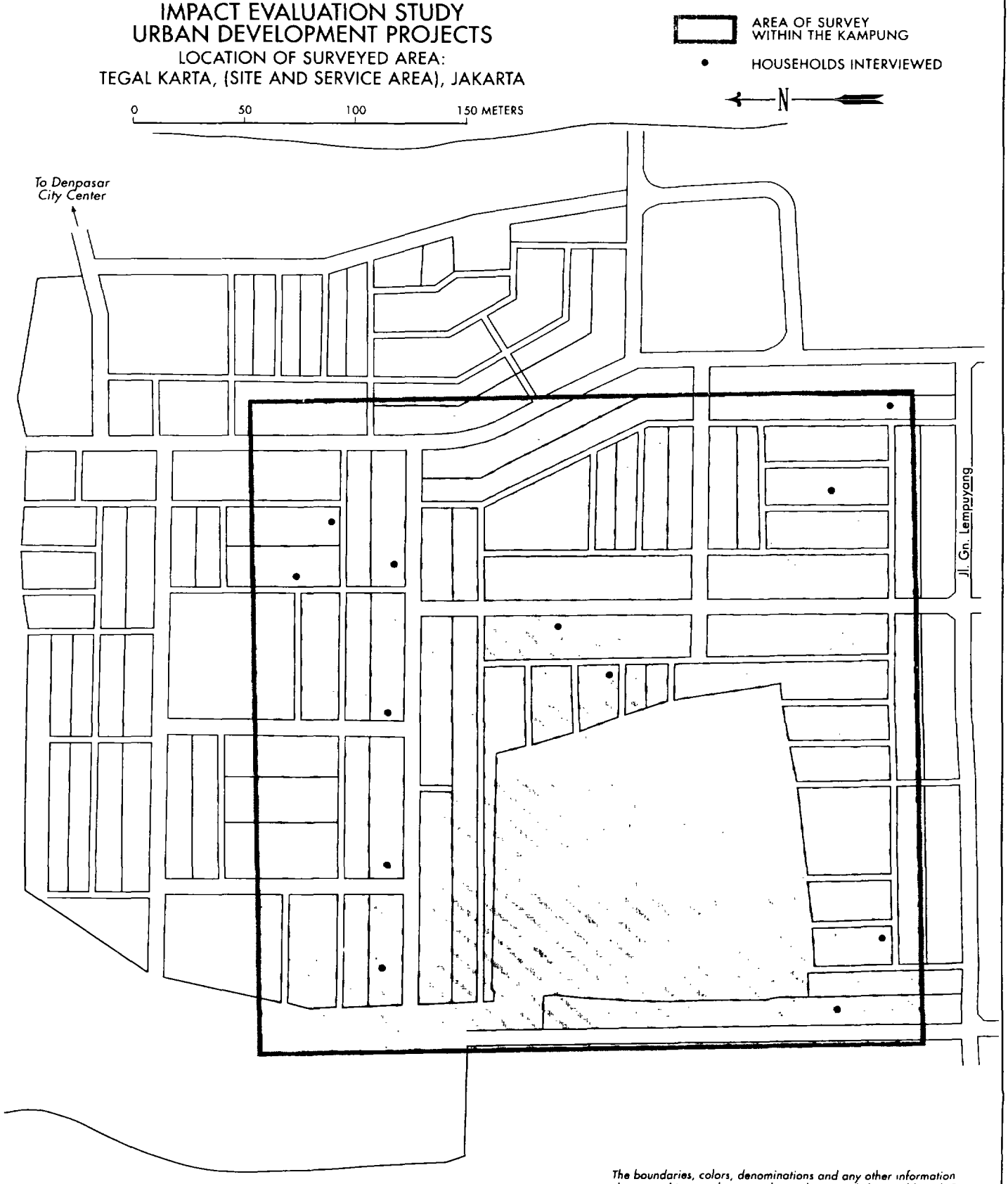
Development Details:
Bridge guilt to connect sites and services area with the center of Denpasar across the river. Roads, water and electricity provided. Basic houses were built, families had to live in these houses for a period of time to pay off the deposit, before being allowed to improve them. Repayments handed over to BTN.

Environment:
Clean, well kept, main problems are noise on the main roads caused by increasing traffic and the congestion caused by the large number of parked cars as vehicle ownership has increased. Rubbish is collected every day and the collection point is a covered building without doors.

Key Findings:
- Most of the residents are the original purchasers.
- Those houses that have sold tend to be the larger ones, which were originally bought for their investment value;
- Many civil servants live in the area, their careers and incomes have progressed in the last then years, therefore increasing the economy of the whole area.
- Many women work from home, the security of home ownership has encouraged many to structural changes to accommodate their micro enterprises (shops, salons, etc)
- Many complained of having been forced to live in the houses without being allowed to make improvements until the deposit was paid off, if they did not live in the houses they risked having the key taken away; it they tried to improve the houses also risk having the keys taken away. Some had to move out of decent rented homes, and live in poor conditions for a considerable time.
- The indirect impacts of the project have been great with rapid development in surrounding areas.

Land and House Prices:
Only larger houses have changed hands and the prices were not available. (one tpe 25 house sold for Rp. 78,000,000

INDONESIA
IMPACT EVALUATION STUDY
URBAN DEVELOPMENT PROJECTS
LOCATION OF SURVEYED AREA:
TEGAL KARTA, (SITE AND SERVICE AREA), JAKARTA



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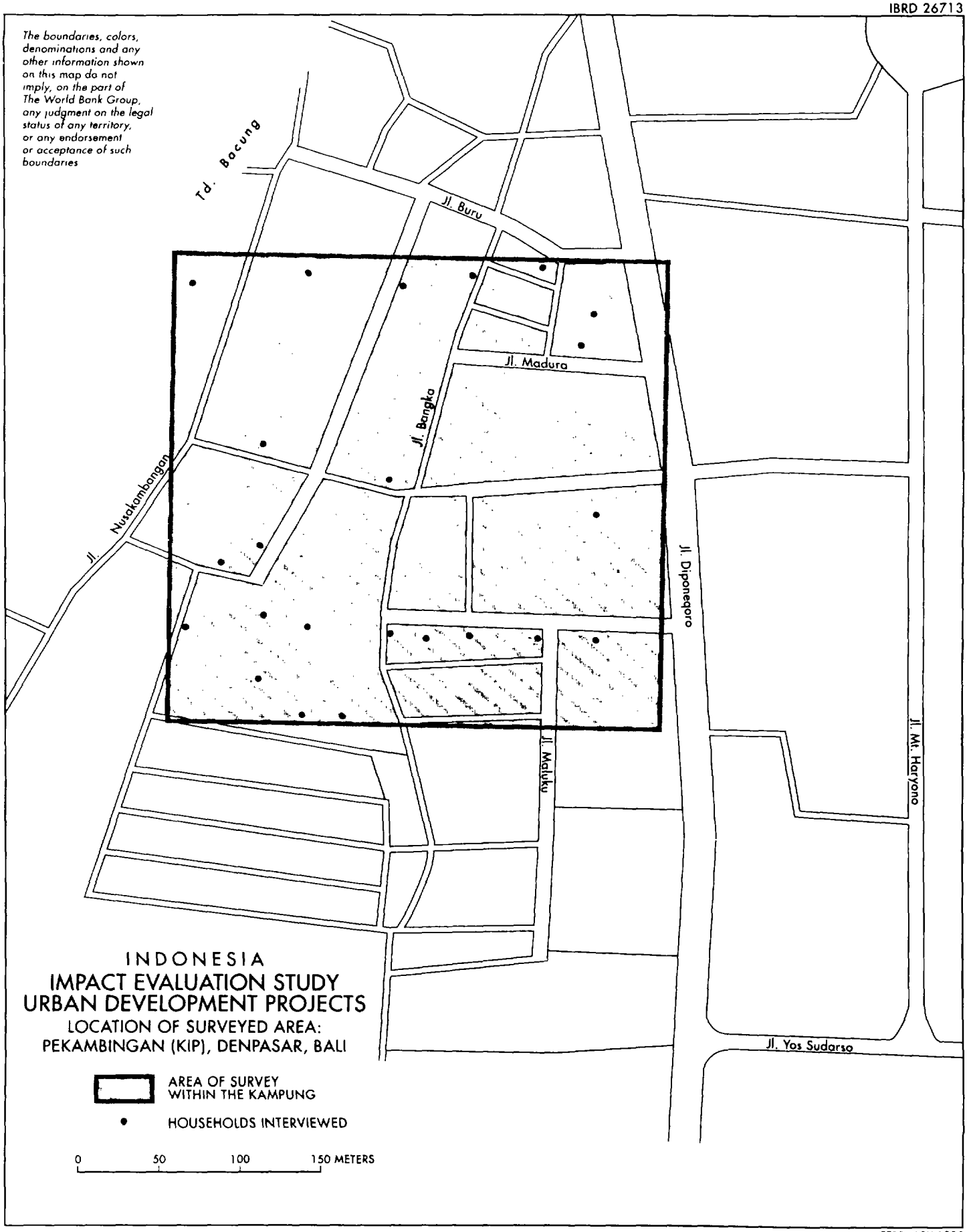


INDONESIA
IMPACT EVALUATION STUDY URBAN DEVELOPMENT PROJECTS
LOCATION OF SURVEYED AREA: PEKAMBINGAN (KIP), DENPASAR, BALI

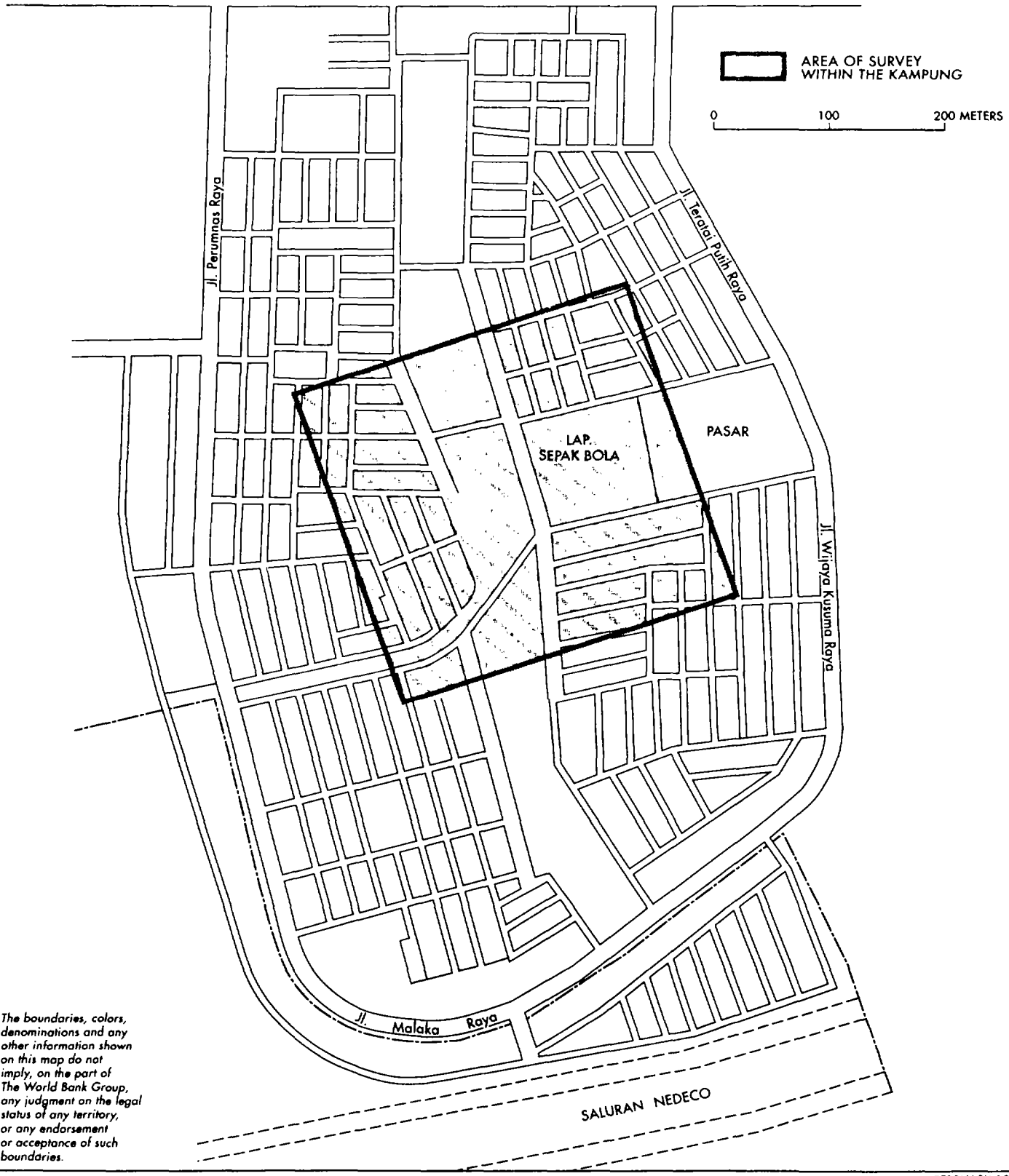
AREA OF SURVEY WITHIN THE KAMPUNG

HOUSEHOLDS INTERVIEWED

0 50 100 150 METERS

FEBRUARY 1995

INDONESIA
IMPACT EVALUATION STUDY
URBAN DEVELOPMENT PROJECTS
LOCATION OF SURVEYED AREA:
MALAKA SARI (SITE AND SERVICE AREA), DENPASAR, BALI



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ATTACHMENT

COMMENTS FROM THE BORROWER

DEPARTEMEN PEKERJAAN UMUM
PERUM PERUMNAS
PERUSAHAAN UMUM PEMBANGUNAN PERUMAHAN NASIONAL
Jalan D.I. Panjaitan Kav. 11 Jakarta 13340 Kotak Pos 137/KBY
Telp. 8194807 (5 saluran), Telex : 48432 RUMNAS IA Fax. 8193826

JAKARTA, JUNE 12,1995

YVES ALBOUY
CHIEF
INFRA STRUCTURE AND ENERGY DIVISION
OPERATION EVALUATION DEPARTEMENT
WORLD BANK HEAD OFFICE
WASHINGTON D.C.20433
U.S.A

RE : DRAFT REPORT OF AN IMPACT EVALUATION STUDY, ESPECIALLY LOAN NO.1972 IND (URBAN IV PROJECT) AND 2725 IND (HOUSING SECTOR LOAN), 1040.

REFERRING TO YOUR LETTER DATED MAY 9,1995 CONCERNING ABOVE MENTIONED SUBJECT, WE WISH TO INFORM YOU THAT WE HAVE NO OBJECTION TO DRAFT REPORT OF AN IMPACT EVALUATION STUDY WHICH RELATED WITH PERUM PERUMNAS.

THANK YOU FOR YOUR KIND ATTENTION AND COOPERATION.

DIRECTOR OF PLANNING AND CONSTRUCTION
PERUM PERUMNAS

PERUSAHAAN UMUM PEMBANGUNAN PERUMAHAN NASIONAL DIREKSI

HARUN HADINEGORO

C.C.
WORLD BANK RESIDENT MISSION
IN INDONESIA.

TIM KOORDINASI PEMBANGUNAN PERKOTAAN
[COORDINATION TEAM FOR URBAN DEVELOPMENT]
Keputusan Menteri Negara Perencanaan Pembangunan Nasional/Ketua
Badan Perencanaan Pembangunan Nasional No.Kep.005/Ket/2/1995

Sekretariat: Kodel House Lt.7 Jl.HR.Rasuna Said kav.B-4
Jakarta 12920, Telp.(021) 522-1511,Fax.(021) 522-1512

June 14, 1995

Mr. Yves Albouy
Chief, Infrastructure and Energy Division
Operations Evaluation Department
The World Bank
1818 H. Street, N.W.
Washington, DC 20433
USA

14 Jun 1995.

Dear Mr. Albouy,

My apologies for the long delay in sending you my comments on the draft report of the Impact Evaluation Study of Indonesia's Urban Loan I, II, III and IV.

First of all, I would like some clarification regarding the report of the impact evaluation study in which I think there are some inconsistencies between the focus of the study and the object of the study: The title of the report "Enhancing the Quality of Life in Urban Indonesia: the Legacy of Kampung Improvement Program" seems to indicate that the evaluation will focus more on the KIP Program within the loan. Yet the main objective of the study was "to understand the medium and long term impacts (5 to 10 years after completion) of eighteen years of lending for urban development"

Indeed the KIP component had a large share of the total lending for the four urban sector loan ranging between 70% to 32.8% in Urban IV. But it is not the only component. There are other components such as solid waste management, drainage, community health services, and land registration. I am sure you are aware of the large urban development loans for IUIDP, in which KIP is only a small component. Therefore, is it appropriate to evaluate the impacts of urban development lending, based only on evaluation of KIP Program? There are many issues that will not come to the surface if we limit the study on KIP Program alone.

Second, in para 4 of the overview, it was stated that the report presents the results of the evaluation of three components in the four urban projects: the Kampung Improvement Program, the sites and services program and the citywide improvement program. However the report only focused or is heavily focused on KIP and no mention or not enough discussions about the other two programs. I also think that more attention should be given on the institutional and financing aspects and the community participation related to the sustainability of the program.

Third, there are some detailed - but in my opinion basic comments - namely:

page 7, point 9
The statement: "despite the improvements effected by KIP under Urban I-IV, the environment in major Indonesian cities continues to deteriorate, exacerbated by unrestrained population growth", is too strong, because in my view, the Indonesia urban population growth is not unrestrained. The Government has been quite successful in its birth control program both in the rural and urban areas. That urban population is still growing at a rapid rate, is not because of "unrestrained population growth", but more because of economic development in the urban areas. Furthermore the deteriorating condition of the urban environment is not only because of the population growth, but also because of growth of urban economic activity, insufficient infrastructure, lack of proper housing/shelter and inadequate industrial/household pollution control or management. I think it is important to be more specific about this point.

page 8, point 12
It was stated that "KIP did not encourage an influx of higher-income groups (that is, "gentrification") into the kampungs, as had originally been feared". Later in the paragraph, it was stated that "Residents are better educated and healthier; household sizes have declined; more residents are employed and have greater income; and women have taken a more active role in meeting the economic needs of their families". The two paragraphs clearly are inconsistent, because the last paragraph is not necessarily caused only by the KIP program. It could not be concluded that the improved population condition is directly related to or caused by KIP. Is the improved condition that of the original residents of KIP, or incoming new residents? This needs to be clarified.

page 9, point 16
In general, we agree with the recommendations. However, you need to be careful about the scale of the future projects. It should be within a citywide context not only related to KIP. Right now we are already moving into region-wide context for infrastructure development, e g. the Bali Environmental Infrastructure Development Program.

Again, my apologies for the delay and thank you for your attention.

Sincerely yours,

Budhy Tjahjati S. Soegijoko
Chairperson TKPP

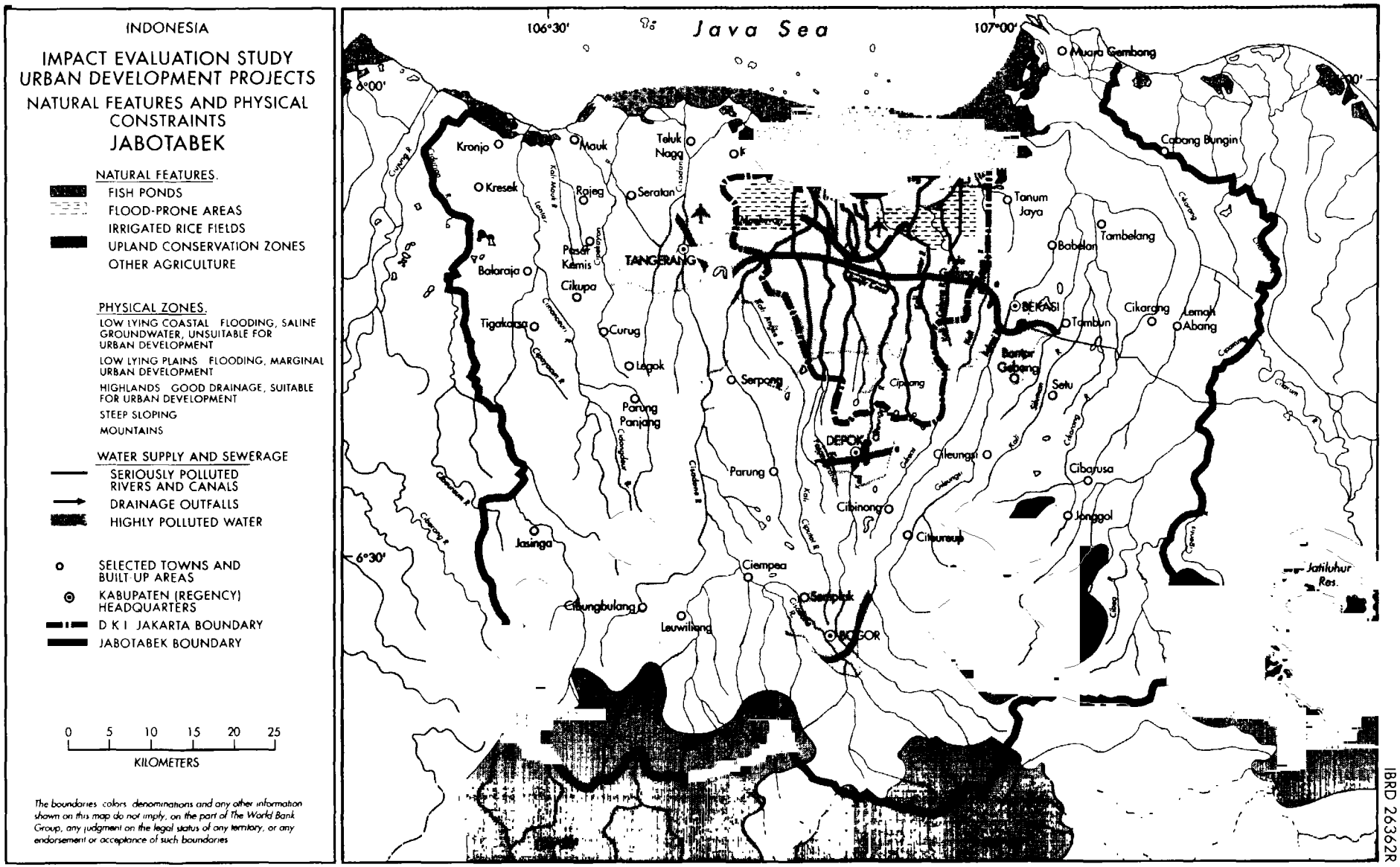
MAP SECTION

INDONESIA

IMPACT EVALUATION STUDY URBAN DEVELOPMENT PROJECTS

NATURAL FEATURES AND PHYSICAL CONSTRAINTS

JABOTABEK



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IMAGING

Report No: 14747 IND
Type: IER